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IN THE MATTER OF THE PROVISION OF :  
BASIC GENERATION SERVICE FOR BASIC :  
GENERATION SERVICE REQUIREMENTS : Docket No. ER18040356  
EFFECTIVE JUNE 1, 2019 :

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**PUBLIC SERVICE ELECTRIC AND GAS COMPANY**

**PROPOSAL FOR**

**BASIC GENERATION SERVICE REQUIREMENTS**

**TO BE PROCURED EFFECTIVE JUNE 1, 2019**

**COMPANY SPECIFIC ADDENDUM**

June 29, 2018

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## **I. USE OF COMMITTED SUPPLY AND CONTINGENCY PLANS**

### **COMMITTED SUPPLY**

“Committed Supply,” means non-utility generation power supplies to which PSE&G has an existing physical or financial entitlement. In prior auctions, PSE&G provided renewable attributes from non-utility generation contracts on a pro-rata basis to BGS-RSCP Suppliers. Since PSE&G’s last non-utility generation contract was terminated in 2014, no renewable attributes will be available going forward. PSE&G has no committed supply.

### **CONTINGENCY PLANS**

While not every contingency can be anticipated, we can differentiate three time periods of concern:

- (a) There are an insufficient number of bids to provide for a fully subscribed Auction Volume either for the BGS-RSCP auction or the BGS-CIEP auction;
  - (b) A default by one of the winning bidders prior to June 1, 2019;
  - (c) A default during the June 1, 2019 – May 31, 2022 supply period.
- (a) Insufficient Number of Bids in Auction**

In order to ensure that the Auction Process achieves the best price for customers, the degree of competition in the auction must be sufficient. To ensure a sufficient degree of competition, the target volume of BGS-RSCP and BGS-CIEP Load purchased at each auction will be decided after the first round bids are received. Provided that there are sufficient bids at the starting prices, the auctions will be held for 100 percent of BGS-RSCP and BGS-CIEP Load.

It is possible that the amount of initial bids will not result in a competitive auction for 100 percent of the BGS-RSCP or BGS-CIEP Load. This determination will be made by the Auction Manager in consultation with the EDCs and the Board Advisor.

In the event that the auction volume is reduced to less than 100 percent of BGS-RSCP or BGS- CIEP Load, PSE&G will implement a contingency plan for the remaining tranches. Under that plan, PSE&G, at its option, will purchase necessary services for the remaining tranches through PJM-administered markets until May 31, 2020. After May 31, 2020 any unfilled tranches may be included in a subsequent auction or treated as in Contingency Plans Part (c) below. This Contingency Plan will alert bidders that in order to secure BGS-RSCP or BGS-CIEP prices from New Jersey BGS customers for their supply, it will be necessary to bid in the auctions. Failure to bid will mean that the BGS market faced by suppliers will be a spot market with volatility and related risks.

Since the contingency plan calls for the purchase of BGS supply in PJM-administered markets, it is considered a strong feature of the auction proposal because it provides bidders a strong incentive to participate in the Auction Process. If bidders were to believe that a less than fully subscribed auction would lead to a negotiation or a secondary market in which PSE&G, on behalf of its customers, would seek to acquire fixed priced supplies, the incentive to participate in the auction and the incentive to offer the best prices in the auction would be diminished.

**(b) Defaults prior to June 1st 2019.**

If a winning bidder defaults prior to the beginning of the BGS service, then, at the option of the EDC, the open tranches may be offered to the other winning bidders or these tranches may be bid out or procured in PJM-administered markets. Additional costs incurred by PSE&G in implementing this Contingency Plan will be assessed against the defaulting supplier's credit security.

**(c) Defaults during the Supply Period**

If a default occurs during the June 1, 2019 through May 31, 2022 period, at the option of PSE&G, the available tranches may be offered to other winning bidders, bid out, or procured in PJM administered

markets. Additional costs incurred by PSE&G in implementing this Contingency Plan will be assessed against the defaulting supplier's credit security.

## **II. ACCOUNTING AND COST RECOVERY**

The accounting and cost recovery that PSE&G proposes for its BGS service is summarized in this section. These provisions are intended to be applicable to PSE&G only. Each EDC will provide individual BGS cost recovery proposals.

### **BGS-RSCP AND BGS-CIEP RECONCILIATION CHARGES**

PSE&G's BGS accounting will account for BGS-RSCP revenues and BGS-CIEP revenues individually as follows:

1. BGS-RSCP and BGS-CIEP revenues will be tracked using established accounting procedures and recorded separately as BGS-RSCP revenue and BGS-CIEP revenue;
2. As previously established for PSE&G, uncollectible revenues are recovered through a component of PSE&G's Societal Benefits Charge.

PSE&G will account for BGS-RSCP and BGS-CIEP costs individually as the sum of the following:

1. Payments made to winning BGS bidders for the provision of BGS-RSCP or BGS-CIEP service;
2. Any administrative costs associated with the provision of BGS-RSCP and BGS-CIEP service;
3. The cost of any procurement of necessary services including capacity, energy, ancillary services, transmission and other expenses related to the Contingency Plan less any payments recovered from defaulting bidders.

Adjustment type charges are necessary in order to balance out the difference between (1) the monthly

amount paid to the BGS-RSCP and BGS-CIEP supplier(s) for BGS-RSCP and BGS-CIEP supply and (2) the total revenue from customers for BGS-RSCP and BGS-CIEP services, respectively.

These reconciliation charge rates are calculated separately each month for BGS-RSCP and BGS-CIEP on a monthly dollars per kWh basis and the respective rates applied to all BGS-RSCP and BGS-CIEP kWh billed. These charges are combined with BGS-RSCP and hourly BGS-CIEP charges for billing although they are published in separate BGS-RSCP reconciliation charge and BGS-CIEP reconciliation charge tariff sheets that are revised monthly to reflect adjustments made based on actual costs. These tariff sheets are filed with the Board approximately 1 day prior to the first day of the effective month.

The BGS-RSCP reconciliation charge and BGS-CIEP reconciliation charge are subject to deferred accounting with interest at the NGC rate previously set by the Board and are determined individually as set forth below:

The reconciliation charges are used in both BGS-RSCP and BGS-CIEP to true up the differences between BGS payments to suppliers and BGS revenues from customers. Differences in costs and cost recovery for a month “x” are computed in month x+1 and applied to BGS rates for month x+2. Two of these differences are shown below:

1. The difference between BGS Costs (as defined above) essentially amounts paid to suppliers for month “x” (this amount is known and paid to suppliers in month x+1) and the calendar month “x” BGS revenue, which is also determined in month x+1. This difference is calculated in month x+1 for recovery in month x+2.
2. The difference between the total adjustment charge revenue intended to be recovered in month “x” and the actual adjustment charge revenue recovered in month “x”. This difference is driven by differences between actual kWh in month “x” and the kWh used to calculate the charge. This amount is known in month x+1.

The reconciliation charges to be applied in month  $x+2$  are calculated as the net of the two differences described above for month “ $x$ ” (plus or minus any cumulative under or over recovery from prior months) divided by the forecast of BGS kWh in month “ $x+2$ ”.

### **III. DESCRIPTION OF BGS TARIFF SHEETS AND OTHER TARIFF ITEMS**

#### **GENERAL**

As described in the generic section of this filing, two different methods will continue to be utilized for the pricing of BGS default supply service to customers: Basic Generation Service – Residential Small Commercial Pricing (BGS-RSCP) for residential and small commercial customers and Basic Generation Service – Commercial and Industrial Energy Pricing (BGS-CIEP), a variable hourly energy pricing for large commercial and industrial customers.

The Company is not proposing any modification of the criteria for BGS-CIEP eligibility from the current peak load share of 500kW. Thus BGS-CIEP is proposed to continue to be the default service for all customers served under delivery rate schedules HTS-High Voltage, HTS-Subtransmission, and LPL-Primary and for LPL-Secondary customers with a peak load share (PLS) of 500 kW or higher.

As in prior years, all other non-residential customers also have the option of electing BGS- CIEP as their default supply service. All non-residential customers with BGS-CIEP as their optional default service will be notified of their option to switch to BGS-CIEP through PSE&G’s website and tariffs. Annually, customers eligible for this option must notify PSE&G no later than the second business day of January of any given year to have BGS-CIEP as their default supply service option for the annual period beginning June 1st of that year. The BGS-RSCP default service will be available to residential and small and medium sized non-residential customers, specifically those served on Rate Schedules RS, RHS, RLM, WH, WHS, HS, BPL, BPL-POF, PSAL, GLP and LPL-Secondary (PLS less than 500 kW).

The following sections describe the tariff sheets that would implement Public Service's BGS service effective June 1, 2019.

### **BGS-RSCP**

Public Service is not proposing any change in the structure of the BGS-RSCP default supply service. The form of the BGS-RSCP tariff sheets are included in Attachment 1 and are indicated as Sheet Nos. 75, 76, and 79. Once the results of the BGS-RSCP Bid are finalized, the values on these tariff sheets will be updated reflecting the results of the bid.

As indicated on these form of tariff sheets, the BGS-RSCP default service is made up of several components: BGS Energy Charges, BGS Capacity Charges, BGS Transmission Charges, and the BGS Reconciliation Charges. These charges will apply for usage in the calendar months of June through September, or October through May, as applicable.

#### **BGS Energy Charges**

The values of the BGS Energy charges applicable to Rate Schedules RS, RHS, RLM, WH, WHS, HS, BPL, BPL-POF and PSAL include the costs related to energy, ancillary services and generation capacity and transmission-related costs. This overall approach is a continuation of the current approved methodology of recovering all electric supply service costs in the kilowatt-hour charges for these rate schedules. The generation capacity and transmission related costs will continue to be recovered through separate charges for customers on Rates GLP and LPL-Secondary (less than 500 kW) based on the customer specific assigned generation capacity and transmission obligation values. The resulting BGS Energy Charges applicable to this latter set of customers thus do not include the costs related to generation capacity and transmission service.



In order to more accurately reflect the costs of providing energy and other electric services when relying on the day-ahead PJM versus the real-time markets, the Company will apply two ancillary services costs, one applied to BGS-RSCP service and the other applied to BGS-CIEP service. A \$2.00 per MWh ancillary services rate is used in the calculation of the BGS-RSCP rates since it is more reflective of costs borne in the day-ahead market. Additionally, Renewable Portfolio Standard costs estimated to be \$19.17 per MWh are included in the calculation of the BGS-RSCP rates to reflect compliance costs. A BGS-CIEP ancillary services cost of \$6.00 per MWh is applied since it is more reflective of costs borne in the real-time market. The transmission related costs included in the BGS Energy Charges for Rate Schedules RS, RHS, RLM, WH, WHS, HS, BPL, BPL-POF, and PSAL are based on the then effective transmission rate for network service for the PSE&G zone, as stated in PJM's Open Access Transmission Tariff (OATT). These BGS Energy charges will change from time to time as FERC approves changes in the PJM OATT and related charges and the BPU approves the corresponding changes in the BGS tariff sheets.

The specific values that will be utilized for the BGS Energy Charges will be calculated from the winning BGS-RSCP bid prices for the Public Service zone. It is the intent of the EDCs that the factors in the tables will be applied to the tranche-weighted average winning bid prices adjusted for seasonal payment factors resulting from the auctions for BGS-RSCP with terms covering the period from June 1, 2019 to May 31, 2020. For example, for Public Service, for the period beginning June 1, 2019, the weighting will be based on the load (i.e. successfully bid tranches) at the 36-month prices from the 2017, 2018, and 2019 BGS-RSCP auctions, and the seasonal payment factors calculated in Attachment 2.

The tables will be updated annually prior to future BGS auctions and utilized to develop customer charges for a related annual period in a similar manner as discussed above. The updates will reflect then current factors such as updated futures prices, factors based on 12-month data, and any changes in the

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customer groups and loads eligible for the BGS-RSCP class.

### **BGS Capacity Charges**

These charges are the separate charges previously mentioned that are designed to recover the costs associated with generation capacity for customers served on Rate Schedules GLP and LPL-Secondary (less than 500 kW). These charges are expressed on a per-kW of generation capacity obligation basis.

The generation capacity costs designed to be used in the development of the BGS-RSCP rates are the relevant current wholesale market prices for capacity based on the average, 2019/2020, 2020/2021, and 2021/2022 Base Residual Auction for RPM (Reliability Pricing Model) results applicable to load served in the PSEG zone.

### **BGS Transmission Charges**

Similar to the BGS Capacity Charges, the BGS Transmission Charges recover the customer specific costs associated with network transmission service for customers on Rates GLP and LPL-Secondary (less than 500 kW). The charge is based on the annual transmission rate for network service for the PSE&G zone, as stated in PJM's Open Access Transmission Tariff (OATT), and as approved by the BPU for inclusion in the BGS Transmission Charge. Bids should be based on the BGS Transmission Charges in effect on January 1, 2019. The winning bid prices will be adjusted for any changes in the BPU-approved BGS Transmission Charges as they occur subsequent to January 1, 2019 and following the procedures in Section 15.9 of the BGS-RSCP Supplier Master Agreements.

### **Transmission Cost Adjustment**

In compliance with the BGS-RSCP Supplier Master Agreement, PSE&G will file with the BPU to change the transmission cost components of the BGS charges to customers as FERC approves changes in the Network Integration Transmission Service rates for the PSE&G zone in the PJM OATT, or the

FERC approves other network transmission-related charges in the PJM OATT. PSE&G will review and verify the basis for any BGS transmission charge adjustment and will file supporting documentation from the OATT, as well as any rate translation spreadsheets used.

For the BGS-RSCP energy only rates (Rate Schedules RS, RHS, RLM, WH, WHS, HS, BPL, BPL-POF and PSAL), upon BPU approval, changes in the OATT rate (per kW of transmission obligation) will be implemented by multiplying such change in the OATT rate by each rate class' ratio of the kW of transmission load of that class divided by the expected annual kWh of that class, and then adjusted for applicable losses. The results, in dollars per kWh, will then be added to all BGS-RSCP Energy charges for each class.

In the event that PJM institutes a charge for transmission network service on an energy basis (per kWh), this charge, corrected for applicable losses, will be added to the BGS-RSCP Energy charges for all kWhs for all rate schedules.

### **BGS Reconciliation Charge**

The BGS Reconciliation Charge for the BGS-RSCP default service is explained in the prior Section II - Accounting and Cost Recovery and will be combined with the BGS-RSCP energy charge for billing on a monthly basis.

### **BGS-CIEP**

The bid product in the 2018 BGS-CIEP auction will continue to be the Generation Capacity Cost, as it was in last year's BGS-CIEP auction. Public Service will continue the use of a value for the CIEP Standby Fee equal to 0.000150 dollars per kWh.

The form of tariff sheets for the Basic Generation Service – Commercial and Industrial Energy - Pricing (BGS-CIEP) are included in Attachment 1 and are indicated as Sheet Nos. 73, 82 and 83.

Similar to the BGS-RSCP, the charges for BGS-CIEP are comprised of several components: BGS Energy Charges, BGS Capacity Charges, BGS Transmission Charges and the BGS Reconciliation Charges.

### **BGS Energy Charges**

The primary component of this charge will be the actual PJM load weighted average Residual Metered Load Aggregate Locational Marginal Price (LMP) of energy for the Public Service Transmission Zone. To this will be added an ancillary service cost (including PJM Administrative Costs) for the Public Service zone of \$6.00 dollars per MWh that was estimated as being reflective of ancillary service costs in the PSEG zone for energy purchased in the real time market. This sum will then be adjusted for losses. Because the LMPs are calculated to include a marginal loss component for the transmission system, a loss correction is performed. This is done by removing the mean hourly marginal transmission loss factor for the PSE&G transmission zone (equal to 0.58179%) from the BPU approved PSE&G delivery tariff loss factors. The result is reflective of losses from the customer meter to the transmission nodes (at which the LMPs are calculated).

### **BGS Capacity Charges**

These charges will recover the costs associated with generation capacity. The BGS Capacity Charge component of the BGS-CIEP bid is set equal to the BGS-CIEP auction clearing price. These charges are expressed on a per-kW of generation capacity obligation basis.

### **BGS Transmission Charges**

BGS-CIEP Transmission Charges recover the customer specific costs associated with Transmission service for customers on BGS-CIEP. The charges are based on the annual transmission rate for network transmission service for the PSE&G zone, in PJM's Open Access Transmission Tariff (OATT), and as

approved by the BPU for inclusion in the BGS-CIEP Transmission Charges. This charge is expressed as a monthly charge on a per-kW of transmission obligation basis. In compliance with the BGS-CIEP Supplier Master Agreement, PSE&G will file with the BPU to change the transmission cost components of the BGS charges to customers as FERC approves changes in the Network Integration Transmission Service rates for the PSE&G zone in the PJM OATT, or the FERC approves other network transmission- related charges in the PJM OATT. PSE&G will review and verify the basis for any BGS transmission charge adjustment and will file supporting documentation from the OATT, as well as any rate translation spreadsheets used.

### **BGS Reconciliation Charge**

The BGS Reconciliation Charge for the BGS-CIEP default service is explained in the prior Section II - Accounting and Cost Recovery and will be combined with the BGS-CIEP energy charge for billing on a monthly basis.

### **OTHER ITEMS**

#### **CIEP STANDBY FEE**

PSE&G will continue to pay each BGS-CIEP supplier a CIEP Standby Fee which is set at 0.000150 dollars per kWh times their pro-rata share of the total energy usage measured at the meters of all of PSE&G's customers whose default service option is limited to BGS-CIEP and those customers who have elected BGS-CIEP as their default supply.

A tariff sheet, included in Attachment 1 and indicated as Sheet No. 73, shows the CIEP Standby Fee as a Delivery Charge that is applicable to all customers having BGS-CIEP as their sole default supply service option and those customers who have elected BGS-CIEP as their default supply. This includes all customers served on Rate Schedules LPL-Secondary (peak load share of 500 kW or greater), LPL-

Primary, HTS-Subtransmission, HTS-High Voltage, and all customers on Rate Schedules HS, GLP, and LPL-Secondary (less than 500 kW) that have elected the BGS-CIEP default supply option.

### **DESCRIPTION OF BGS PRICING SPREADSHEETS**

As described in the generic write-up, the resulting charge for each BGS rate element (i.e. Rate RS summer charge, winter charge, etc.) for the non-hourly BGS supply service will generally be based on factors applied to the tranche weighted average winning bid prices adjusted for seasonal payments. These factors have been developed based on the ratios of the estimated underlying market costs of each rate element (for each rate class) to the overall all-in BGS cost. The tables included in Attachments 2 and 3 present all of the input data, intermediate calculations, and the final results in the calculation of these factors.

The following is a description of the calculations shown in the spreadsheet titled “Development of BGS-RSCP Cost and Bid Factors for the 2018/2019 BGS Filing”, and included as Attachment 2.

**Table #1** (% Usage during PJM On-Peak Period) contains the percentage of on-peak load, inputted by month, for each rate schedule. The on-peak period as used in this table (referred to as PJM periods) is defined as the 16-hour period from 7 AM to 11 PM, Monday through Friday. All remaining weekday hours and all hours on weekends and holidays recognized by the National Electric Reliability Council (NERC) are considered the off-peak period. This is consistent with the time periods used in the forwards market for trading of bulk power. The values in this table for each month are the average on-peak percentages from the years 2015 and 2016 and 2017, as calculated from the same load research data used for retail settlement for current customers that have chosen to be supplied by a Third Party Supplier (TPS). The average for a three-year period was used to reduce the variability of weather effects on the percentage from any single year.

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**Table #2** (% Usage During PSE&G On-Peak Billing Period) contains the percentage of on-peak load, by month, for each applicable rate schedule based on the definitions of time periods as contained in Public Service's delivery rate schedules. Since, excluding the hourly price BGS rates, only Rate Schedule RLM and LPL-Sec are billed on a time-of-day basis utilizing time periods, these are the only two columns in this table where data has been inputted. These are the percentage of actual on-peak kWh usage for the years 2015, 2016, and 2017. As was done with Table #1, the three-year average was used to reduce the effects of weather in a particular year.

**Table #3** (Class Usage @ customer) contains the total calendar month sales forecasted for the calendar year 2018 with a migration adjustment. The values in Table #3 will be updated in January 2019 to better reflect the amount by rate schedule that could be in effect starting on June 1, 2019. For Rate LPL-Secondary, these values have been reduced for the percentage of customers having a Peak Load Share of 500 kW or greater, and thus having BGS- CIEP as their default service. These monthly percentages were based on the 2017 monthly percentages of total actual sales for customers meeting this Peak Load Share threshold.

**Table #4** (Forwards Prices – Energy Only @ Bulk System) contains the forward prices for energy, by time period and month for the BGS analysis period. These values are the most recent energy on-peak forwards values available for the PJM West trading hub for the period of June 2019 to May 2020 and the historical ratio of actual off-peak to on-peak PJM LMPs from June 2015 through September 2017 and March 2015 through February 2018, for summer and winter periods, respectively.

An adjustment of the forwards prices contained in Table #4 is then made to correct for the effects of transmission congestion in the PJM system between the PJM West trading hub and the Public Service zone where the BGS supply will be utilized.

**Table #5** (Congestion Factors) contains an estimate of the average congestion factors, by month and

time period, which when multiplied by the prices at the PJM West trading hub will result in costs for power delivered into the Public Service zone. These Hub-to-Zone differentials are based on the average percent differences from June 2015 through September 2017 and March 2015 through February 2018, for summer and winter periods, respectively.

**Table #6 (Losses)** The factors utilized for total average losses, including PJM losses, are inputted in the upper portion of Table #6 (Losses) by rate schedule. Delivery loss factors used are those in the Company's filed tariff. PJM losses are the average percentage PJM EHV losses plus inadvertent energy for the three-year period June 2013 through May 2016, a value equal to 0.456%.

The lower portion of this table shows the derivation of the effective losses from the customer meter to the transmission nodes at which the LMPs are calculated. The loss factors shown are the Delivery loss factors from the Company's filed tariff less the mean hourly marginal loss factors for the PSE&G transmission zone as calculated by PJM. The resulting loss factor is reflective of losses from the customer meter to the transmission nodes (at which the LMPs are calculated) and at which payments to the winning bidders are based. The marginal loss factors used above are actual marginal loss de-ration factors based May 2015 to April 2018 data adjusted for the portion of marginal losses attributed to PJM extra-high voltage.

Since the service for all of the rates indicated is at secondary voltages, the applicable loss factors are identical for all rates.

**Table #7 (Summary of Average BGS Energy Only Unit Costs @ Customer – PJM Time Periods)** is the calculation of the energy only costs by rate, time period and season. These values are the seasonal and time period average costs per MWh as measured at the customer billing meter (from Table #3), based on the forwards prices (from Table #4) corrected for congestion (from Table #5), losses (from Table #6), and monthly time period weights (from Table #1). These average costs do not include the costs



associated with Ancillary Services, Renewable Portfolio Standard compliance, Generation Obligation or Transmission costs, which will be considered in subsequent calculations.

**Table #8** (Summary of Average BGS Energy Only Costs @ Customer – PJM Time Periods) indicates the total value, in thousands of dollars, of the average BGS energy only costs. These are the results of the multiplication of the unit costs from Table #7, the monthly time period weights from Table #1 and the total sales to customers from Table #3.

Since the end result of these calculations are to be utilized in the development of retail BGS rates, the rates utilizing time of day pricing must be developed based upon the time periods as defined for billing.

**Table #9** (Summary of Average BGS Energy Only Unit Costs @ Customer – PSE&G Time Periods) shows the result of the corrections for the two rates billed on a time of day basis, Rates RLM and LPL-Secondary (less than 500 kW). These values are calculated based on the assumption that the MWhs included in the PJM on-peak time period and not included in the PSE&G on-peak time periods are at the average of the on and off-peak PJM prices.

**Table #10** (Generation & Transmission Obligations and Costs and Other Adjustments) The next steps set up the values necessary for the inclusion of the costs of the Generation Capacity and Transmission obligations. The top portion of Table #10 shows the total obligations with a migration adjustment, by rate schedule, that are currently being utilized in the year 2018. The values in the top portion of Table #10 will be updated in January 2019 to better reflect the aggregate amount by rate schedule that could be in effect on June 1, 2019. Similar to the methodology used in Table #3, the obligations for Rate LPL-Secondary have been reduced for the percentage of customers having a Peak Load Share of 500 kW or greater. The middle portion of this table shows the number of summer and winter days and months that are used in this analysis. The bottom portion of this table shows the annual cost for transmission service and the average price of generation capacity for the three relevant RPM auctions The cost of

transmission service is equal to the rate in the PJM OATT for network transmission service in the PSE&G zone. The generation capacity costs used are the relevant current wholesale market prices for capacity. This table also shows the level of blocking in current BGS charges for Rates RS and RHS, which will be utilized in the later calculations of the blocking of the new BGS charges for these rates. The Company has previously objected to the blocking of these charges since there is no compelling cost basis for any such blocking. The Company proposes to keep blocking in this year's filing, but wishes to note that it does not believe that there is a cost basis for doing so.

**Table #11** (Ancillary Services and Renewable Portfolio Standard) An estimate of the effects of the costs of ancillary services and Renewable Portfolio Standard is included in the development of the final BGS rates. The values of \$2.00 per MWh and \$19.17 per MWh are used, respectively. Since the actual costs are a complex combination of many factors, this Board-approved estimate of the overall annual average value, expressed on a dollar per MWh basis, is used as a reasonable and practical alternative.

**Table #12** (Summary of Obligation Costs Expressed as \$/MWh @ Customer – For Non- Demand Rates Only) shows the result of the allocation of both the transmission and generation costs on a per kWh basis to those rates whose BGS service will only be recovered through energy charges, Rates RS through BPL. The obligation costs for the rates not indicated in this table, Rates GLP and LPL-Sec, will be recovered directly through a distinct obligation charge based on a separate charge times each customer's assigned transmission and generation capacity obligation. The annual values are calculated as the total obligations (upper part of Table #10) times their costs (lower part of Table #10) divided by the appropriate total rate schedule MWh (from Table #3).

**Table #13** (Summary of BGS Unit Costs @ Customer) is the result of the inclusion of the Transmission, Generation Capacity, Ancillary Services, and Renewable Portfolio Standard costs to the energy only costs shown in Table #9. The top portion of this table shows the total estimated all-in BGS costs for the

non-demand rates (Rates RS, RHS, RLM, WH, WHS, HS, PSAL and BPL), whose BGS costs are proposed to be recovered on an energy only basis through kWh charges. The all-in costs for the residential non-time of day rates, Rates RS and RHS, are blocked in the summer based on the current level of BGS blocking inputted in Table #10 so as to maintain the same BGS rate differential that currently exists. The middle section shows the results for the demand rates (Rates GLP and LPL-Sec) whose BGS costs will be recovered through both energy charges on a per kWh basis and obligation charges on a per kW of obligation basis. The left hand columns indicate the unit energy costs, while the right hand columns indicate the obligation costs. The bottom portion of this table shows the total estimated costs for BGS, based on the assumptions utilized in the above tables, and the average per unit cost, as measured at the customer meters or the transmission nodes.

**Table #14** (Ratio of BGS Unit Costs @ Customer to All-In Average Cost @ Transmission Nodes)

indicates the ratio of the individual rate element costs from Table #13 to the overall all-in cost as measured at the transmission nodes, plus constants, where applicable. These bid factor ratios are a key element in the calculation of the actual BGS-RSCP charges, and will be used in later tables to convert the winning bids into actual BGS rates charged to customers.

The top portion of this table indicates these ratios for the non-demand rates while the ratios for the demand rates are shown on the bottom portion of the table. Since the unit rates charged for generation and transmission obligation (as shown in the right hand columns) for Rates GLP and LPL-Sec are not unitized but kept at the estimated market value, it is necessary to modify the energy ratios for these two rate classes to assure that the resulting overall revenue from charges to the customers equals the payment to suppliers. The first of the values indicated, the “multiplier” is utilized as a ratio, with the “constant” term an additive adjustment to the resulting value. For example, if the tranche weighted average winning bid prices adjusted for seasonal payment factors is \$91.444 per MWh and the GLP multiplier for

summer is 1.012 and the constant is (\$41.303), the summer BGS rate charged customers would equal  $(\$91.444 * 1.012) - \$41.303$ , or \$51.24 per MWh.

**Assumptions:** This unnumbered table summarizes some of the most important assumptions utilized in the above calculations.

**Table #15** (Summary of Total BGS Costs by Season) shows the calculation of the total BGS Costs, utilizing the total customer usage from Table #3 and the all-in unit costs from Table #13. The lower left portion of this table indicates the relative percentage of total costs by season for all rate schedules, while the center shows the calculation of the overall average all-in seasonal unit costs on a dollar per MWh basis. The ratio of these overall average seasonal costs to the overall total cost, shown in the lower right hand portion of this table, are the seasonal payment ratios upon which payments to the winning bidders are based. Since the normal calculation would produce an atypical result of a summer payment ratio (factor) that is lower than the winter payment ratio (factor) for the 2019/2020 BGS Supply Period, a factor of 1.0 will be used for both the summer and winter payment factors.

**Table #16** (Spreadsheet Error Checking) shows the reconciliation between the customer revenue calculation to the BGS supplier payments, utilizing an assumed winning bid price (as indicated) and the calculated summer-winter payment ratios, the customer usage from Table #3 and the all-in unit costs from Table #13.

**Table #17** (Total Supplier Energy @ transmission nodes) shows the calculation of the total supplier energy by season, utilizing the total customer usage from Table #3 and the meter to transmission node loss factors from the lower portion of Table #6.

The second spreadsheet used in the calculation of the final BGS-RSCP rates is included as Attachment #3, and is titled "Calculation of June 2019 to May 2020 BGS-RSCP Rates". The tables in this

spreadsheet calculate the weighted average winning bid price and convert it into the final BGS-RSCP rates that are charged to customers. An explanation of each of the six tables, labeled as Table A through F, is as follows.

**Table A** (Auction Results) contains the results of the prior two BGS auctions as well as the results (shown with illustrative values) of the current auction. From these values, the weighted average annual bid price (shown on line #13) is calculated. All of the formulas used in this table are shown in the right hand column of this table, under the heading of “Notes:”

**Table B** (Ratio of BGS Unit Costs @ Customer to All-In Average Cost @ transmission nodes) is a repeat of the values shown in Table #14 from Attachment 2, the bid factors calculated based on current market conditions.

**Table C** (Preliminary Resulting BGS Rates) contains the preliminary customer BGS-RSCP rates as the product of the weighted average bid price (from Table A) and the Bid Factors from Table B.

**Table D** (Revenue Recovery Calculations) contains a comparison of the total anticipated rate revenue billed to customers based on the preliminary BGS-RSCP rates developed in Table C and the anticipated total season payments to BGS suppliers, based on the data in Table A. The calculation of the kWh Rate Adjustment Factors are also done in this table, which are equal to the seasonal dollar differences between the anticipated billed revenue and supplier payments, divided by the total anticipated seasonal billed BGS-RSCP energy related charges.

**Table E** (Final Resulting BGS Rates) contains the final adjusted BGS-RSCP rates, which are equal to the preliminary BGS-RSCP rates shown in Table C times the seasonal kWh Rate Adjustment Factors that were developed in Table D.

**Table F** (Spreadsheet Error Checking) contains a comparison of the total anticipated rate revenue billed

to customers based on the final BGS-RSCP rates developed in Table E and the anticipated total season payments to BGS suppliers, based on the data in Table A.

#### **IV. CONCLUSION**

In connection with the approval of this filing, the Company requests that the Board determine:

1. It is necessary and in the public interest for the electric public utilities to secure service for the BGS-RSCP and BGS-CIEP customers, as approved herein, for the period June 1, 2019 to May 31, 2022.
2. The Company's proposed accounting for BGS is approved for purposes of accounting and BGS cost recovery.
3. The proposed BGS Contingency Plan is approved, and there will exist a presumption of prudence with respect to the BGS Auction Plan method and the costs incurred for BGS service under the Auction Plan and the related Contingency Plan.
4. The Company's Rate Design Methodology and Tariff Sheets are approved.

**V. ATTACHMENT 1 - TARIFF SHEETS**

"Form Of" BGS-RSCP, BGS-CIEP and CIEP Standby Fee tariff sheets

**PUBLIC SERVICE ELECTRIC AND GAS COMPANY**

**Sixth Revised Sheet No. 73**

**B.P.U.N.J. No. 15 ELECTRIC**

**Superseding  
Fifth Revised Sheet No. 73**

**COMMERCIAL AND INDUSTRIAL ENERGY PRICING (CIEP) STANDBY FEE**

**APPLICABLE TO:**

All kilowatthour usage under Rate Schedules LPL-Secondary (500 kilowatts or greater), LPL-Primary, HTS-Subtransmission, HTS-Transmission, HTS-High Voltage and all kilowatthour usage for customers under Rate Schedules HS, GLP and LPL-Secondary (less than 500 kilowatts) who have elected hourly energy pricing service from either BGS-CIEP or a Third Party Supplier.

**Charge  
(per kilowatthour)**

Commercial and Industrial Energy Pricing (CIEP) Standby Fee .....	\$ 0.000150
Charge including New Jersey Sales and Use Tax (SUT) .....	\$ 0.000160

The above charges shall recover costs associated with the administration, maintenance and availability of the Basic Generation Service default electric supply service for applicable rate schedules. These charges shall be combined with the Distribution Kilowatthour Charges for billing.

Kilowatt threshold noted above is based upon the customer's Peak Load Share of the overall summer peak load assigned to Public Service by the Pennsylvania-New Jersey-Maryland Office of the Interconnection (PJM). See Section 9.1, Measurement of Electric Service, of the Standard Terms and Conditions of this Tariff.



**PUBLIC SERVICE ELECTRIC AND GAS COMPANY**

**XXX Revised Sheet No. 75**

**B.P.U.N.J. No. 15 ELECTRIC**

**Superseding**

**XXX Revised Sheet No. 75**

**BASIC GENERATION SERVICE – RESIDENTIAL SMALL COMMERCIAL PRICING (BGS-RSCP)  
ELECTRIC SUPPLY CHARGES**

**APPLICABLE TO:**

Default electric supply service for Rate Schedules RS, RHS, RLM, WH, WHS, HS, BPL, BPL-POF, PSAL, GLP and LPL-Secondary (less than 500 kilowatts).

**BGS ENERGY CHARGES:**

**Applicable to Rate Schedules RS, RHS, RLM, WH, WHS, HS, BPL, BPL-POF and PSAL**

**Charges per kilowatthour:**

Rate Schedule	For usage in each of the months of <u>October through May</u>		For usage in each of the months of <u>June through September</u>	
	<u>Charges</u>	<u>Charges Includ- ing SUT</u>	<u>Charges</u>	<u>Charges Includ- ing SUT</u>
RS – first 600 kWh	\$x.xxxxxx	\$x.xxxxxx	\$x.xxxxxx	\$x.xxxxxx
RS – in excess of 600 kWh	x.xxxxxx	x.xxxxxx	x.xxxxxx	x.xxxxxx
RHS – first 600 kWh	x.xxxxxx	x.xxxxxx	x.xxxxxx	x.xxxxxx
RHS – in excess of 600 kWh	x.xxxxxx	x.xxxxxx	x.xxxxxx	x.xxxxxx
RLM On-Peak	x.xxxxxx	x.xxxxxx	x.xxxxxx	x.xxxxxx
RLM Off-Peak	x.xxxxxx	x.xxxxxx	x.xxxxxx	x.xxxxxx
WH	x.xxxxxx	x.xxxxxx	x.xxxxxx	x.xxxxxx
WHS	x.xxxxxx	x.xxxxxx	x.xxxxxx	x.xxxxxx
HS	x.xxxxxx	x.xxxxxx	x.xxxxxx	x.xxxxxx
BPL	x.xxxxxx	x.xxxxxx	x.xxxxxx	x.xxxxxx
BPL-POF	x.xxxxxx	x.xxxxxx	x.xxxxxx	x.xxxxxx
PSAL	x.xxxxxx	x.xxxxxx	x.xxxxxx	x.xxxxxx

The above Basic Generation Service Energy Charges reflect costs for Energy, Generation Capacity, Transmission, and Ancillary Services (including PJM Interconnection, L.L.C. (PJM) Administrative Charges). The portion of these charges related to Network Integration Transmission Service, including the PJM Seams Elimination Cost Assignment Charges, the PJM Reliability Must Run Charge and PJM Transmission Enhancement Charges may be changed from time to time on the effective date of such change to the PJM rate for these charges as approved by the Federal Energy Regulatory Commission (FERC).

Kilowatt threshold noted above is based upon the customer's Peak Load Share of the overall summer peak load assigned to Public Service by the Pennsylvania-New Jersey-Maryland Office of the Interconnection (PJM). See Section 9.1, Measurement of Electric Service, of the Standard Terms and Conditions of this Tariff.

Date of Issue:

Issued by SCOTT S. JENNINGS, Vice President Finance – PSE&G  
80 Park Plaza, Newark, New Jersey 07102  
Filed pursuant to Order of Board of Public Utilities dated  
in Docket No.

Effective:

**PUBLIC SERVICE ELECTRIC AND GAS COMPANY**

**XXX Revised Sheet No. 76**

**B.P.U.N.J. No. 15 ELECTRIC**

**Superseding**

**XXX Revised Sheet No. 76**

**BASIC GENERATION SERVICE – RESIDENTIAL SMALL COMMERCIAL PRICING (BGS-RSCP)  
ELECTRIC SUPPLY CHARGES  
(Continued)**

**BGS ENERGY CHARGES:**

**Applicable to Rate Schedules GLP and LPL-Sec.**

**Charges per kilowatthour:**

Rate Schedule	For usage in each of the months of <u>October through May</u>		For usage in each of the months of <u>June through September</u>	
	<u>Charges</u>	<u>including SUT</u>	<u>Charges</u>	<u>including SUT</u>
GLP	\$ x.xxxxxx	\$ x.xxxxxx	\$ x.xxxxxx	\$ x.xxxxxx
GLP Night Use	x.xxxxxx	x.xxxxxx	x.xxxxxx	x.xxxxxx
LPL-Sec. under 500 kW				
On-Peak	x.xxxxxx	x.xxxxxx	x.xxxxxx	x.xxxxxx
Off-Peak	x.xxxxxx	x.xxxxxx	x.xxxxxx	x.xxxxxx

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

Kilowatt thresholds noted above are based upon the customer's Peak Load Share of the overall summer peak load assigned to Public Service by the Pennsylvania-New Jersey-Maryland Office of the Interconnection (PJM). See Section 9.1, Measurement of Electric Service, of the Standard Terms and Conditions of this Tariff.

Date of Issue:

Issued by SCOTT S. JENNINGS, Vice President Finance – PSE&G  
80 Park Plaza, Newark, New Jersey 07102  
Filed pursuant to Order of Board of Public Utilities dated  
in Docket No.

Effective:

**PUBLIC SERVICE ELECTRIC AND GAS COMPANY**

**XXX Revised Sheet No. 79**

**B.P.U.N.J. No. 15 ELECTRIC**

**Superseding**

**XXX Revised Sheet No. 79**

**BASIC GENERATION SERVICE – RESIDENTIAL SMALL COMMERCIAL PRICING (BGS-RSCP)  
ELECTRIC SUPPLY CHARGES**

**(Continued)**

**BGS CAPACITY CHARGES:**

**Applicable to Rate Schedules GLP and LPL-Sec.**

**Charges per kilowatt of Generation Obligation:**

Charge applicable in the months of June through September .....\$ x.xxxx

Charge including New Jersey Sales and Use Tax (SUT) .....\$ x.xxxx

Charge applicable in the months of October through May .....\$ x.xxxx

Charge including New Jersey Sales and Use Tax (SUT) .....\$ x.xxxx

The above charges shall recover each customer's share of the overall summer peak load assigned to the Public Service Transmission Zone by the PJM Interconnection, L.L.C. (PJM) as adjusted by PJM assigned capacity related factors and shall be in accordance with Section 9.1, Measurement of Electric Service, of the Standard Terms and Conditions.

**BGS TRANSMISSION CHARGES**

**Applicable to Rate Schedules GLP and LPL-Sec.**

**Charges per kilowatt of Transmission Obligation:**

Currently effective Annual Transmission Rate for  
Network Integration Transmission Service for the  
Public Service Transmission Zone as derived from the  
FERC Electric Tariff of the PJM Interconnection, LLC ..... \$ xx,xxx.xx per MW per year

PJM Reallocation .....\$ x.xx per MW per year

PJM Seams Elimination Cost Assignment Charges .....\$ x.xx per MW per month

PJM Reliability Must Run Charge .....\$ x.xx per MW per month

PJM Transmission Enhancements

Trans-Allegheny Interstate Line Company ..... \$xxx.xx per MW per month

Virginia Electric and Power Company .....\$ xx.xx per MW per month

Potomac-Appalachian Transmission Highline L.L.C. ....\$ xx.xx per MW per month

PPL Electric Utilities Corporation.....\$ xx.xx per MW per month

American Electric Power Service Corporation .....\$ xx.xx per MW per month

Atlantic City Electric Company. ....\$ xx.xx per MW per month

Delmarva Power and Light Company .....\$ x.xx per MW per month

Potomac Electric Power Company .....\$ x.xx per MW per month

Baltimore Gas and Electric Company .....\$ x.xx per MW per month

Jersey Central Power and Light .....\$ xx.xx per MW per month

Mid Atlantic Interstate Transmission.....\$ x.xx per MW per month

PECO Energy Company.....\$ xx.xx per MW per month

Above rates converted to a charge per kW of Transmission

Obligation, applicable in all months .....\$ x.xxxx

Charge including New Jersey Sales and Use Tax (SUT) .....\$ x.xxxx

The above charges shall recover each customer's share of the overall summer peak transmission load assigned to the Public Service Transmission Zone by the PJM Interconnection, L.L.C. (PJM) as adjusted by PJM assigned transmission capacity related factors and shall be in accordance with Section 9.1, Measurement of Electric Service, of the Standard Terms and Conditions. These charges will be changed from time to time on the effective date of such change to the PJM rate for charges for Network Integration Transmission Service, including the PJM Seams Elimination Cost Assignment Charges, the PJM Reliability Must Run Charge and PJM Transmission Enhancement Charges as approved by Federal Energy Regulatory Commission (FERC).

Date of Issue:

Issued by SCOTT S. JENNINGS, Vice President Finance – PSE&G  
80 Park Plaza, Newark, New Jersey 07102  
Filed pursuant to Order of Board of Public Utilities dated  
in Docket No.

Effective:

**PUBLIC SERVICE ELECTRIC AND GAS COMPANY**

**XXX Revised Sheet No. 82**

**B.P.U.N.J. No. 15 ELECTRIC**

**Superseding  
XXX Revised Sheet No. 82**

**BASIC GENERATION SERVICE – COMMERCIAL AND INDUSTRIAL ENERGY PRICING (CIEP)  
ELECTRIC SUPPLY CHARGES**

**APPLICABLE TO:**

Default electric supply service for Rate Schedules LPL-Secondary (500 kilowatts or greater), LPL-Primary, HTS-Subtransmission, HTS-Transmission, HTS-High Voltage and to customers served under Rate Schedules HS, GLP and LPL-Secondary (less than 500 kilowatts) who have elected BGS-CIEP as their default supply service.

**BGS ENERGY CHARGES:**

**Charges per kilowatthour:**

BGS Energy Charges are hourly and include PJM Locational Marginal Prices, and PJM Ancillary Services. The total BGS Energy Charges are based on the sum of the following:

- The real time PJM Load Weighted Average Residual Metered Load Aggregate Locational Marginal Prices for the Public Service Transmission Zone, adjusted for losses (tariff losses, as defined in Standard Terms and Conditions Section 4.3, adjusted to remove the mean hourly PJM marginal losses of ~~0.581790.62372~~%), and adjusted for SUT, plus
- Ancillary Services (including PJM Administrative Charges) at the rate of \$0.006000 per kilowatthour, adjusted for losses (tariff losses, as defined in Standard Terms and Conditions Section 4.3, adjusted to remove the mean hourly PJM marginal losses of ~~0.581790.62372~~%), and adjusted for SUT, plus

**BGS CAPACITY CHARGES:**

**Charges per kilowatt of Generation Obligation:**

Charge applicable in the months of June through September .....	\$ x.xxxx
Charge including New Jersey Sales and Use Tax (SUT) .....	\$ x.xxxx
Charges applicable in the months of October through May .....	\$ x.xxxx
Charges including New Jersey Sales and Use Tax (SUT).....	\$ x.xxxx

The above charges shall recover each customer's share of the overall summer peak load assigned to the Public Service Transmission Zone by the PJM Interconnection, L.L.C. (PJM) as adjusted by PJM assigned capacity related factors and shall be in accordance with Section 9.1, Measurement of Electric Service, of the Standard Terms and Conditions.

Date of Issue:

Issued by SCOTT S. JENNINGS, Vice President Finance – PSE&G  
80 Park Plaza, Newark, New Jersey 07102  
Filed pursuant to Order of Board of Public Utilities dated  
in Docket No.

Effective:

**PUBLIC SERVICE ELECTRIC AND GAS COMPANY**

**XXX Revised Sheet No. 83**

**B.P.U.N.J. No. 15 ELECTRIC**

**Superseding**

**XXX Revised Sheet No. 83**

**BASIC GENERATION SERVICE – COMMERCIAL AND INDUSTRIAL ENERGY PRICING (CIEP)  
ELECTRIC SUPPLY CHARGES  
(Continued)**

**BGS TRANSMISSION CHARGES**

**Charges per kilowatt of Transmission Obligation:**

Currently effective Annual Transmission Rate for Network Integration Transmission Service for the Public Service Transmission Zone as derived from the FERC Electric Tariff of the PJM Interconnection, LLC .....	\$ xxx,xxx.xx per MW per year
PJM Reallocation.....	\$ x.xx per MW per year
PJM Seams Elimination Cost Assignment Charges .....	\$ x.xx per MW per month
PJM Reliability Must Run Charge.....	\$ x.xx per MW per month
PJM Transmission Enhancements	
Trans-Allegheny Interstate Line Company .....	\$xxx.xx per MW per month
Virginia Electric and Power Company .....	\$ xx.xx per MW per month
Potomac-Appalachian Transmission Highline L.L.C. ....	\$ xx.xx per MW per month
PPL Electric Utilities Corporation.....	\$ xx.xx per MW per month
American Electric Power Service Corporation .....	\$ xx.xx per MW per month
Atlantic City Electric Company. ....	\$ xx.xx per MW per month
Delmarva Power and Light Company.....	\$ x.xx per MW per month
Potomac Electric Power Company.....	\$ x.xx per MW per month
Baltimore Gas and Electric Company.....	\$ x.xx per MW per month
Jersey Central Power and Light .....	\$ xx.xx per MW per month
Mid Atlantic Interstate Transmission.....	\$ x.xx per MW per month
PECO Energy Company.....	\$ xx.xx per MW per month

Above rates converted to a charge per kW of Transmission Obligation, applicable in all months.....	\$ x.xxxx
Charge including New Jersey Sales and Use Tax (SUT) .....	\$ x.xxxx

The above charges shall recover each customer's share of the overall summer peak transmission load assigned to the Public Service Transmission Zone by the PJM Interconnection, L.L.C. (PJM) as adjusted by PJM assigned transmission capacity related factors and shall be in accordance with Section 9.1, Measurement of Electric Service, of the Standard Terms and Conditions. These charges will be changed from time to time on the effective date of such charge to the PJM rate for charges for Network Integration Transmission Service, including the PJM Seams Elimination Cost Assignment Charges, the PJM Reliability Must Run Charge and PJM Transmission Enhancement Charges as approved by Federal Energy Regulatory Commission (FERC).

Kilowatt threshold noted above is based upon the customer's Peak Load Share of the overall summer peak load assigned to Public Service by the Pennsylvania-New Jersey-Maryland Office of the Interconnection (PJM). See Section 9.1, Measurement of Electric Service, of the Standard Terms and Conditions of this Tariff.

Date of Issue:

Issued by SCOTT S. JENNINGS, Vice President Finance – PSE&G  
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in Docket No.

Effective:

**VI. ATTACHMENT 2 - SPREADSHEETS FOR THE DEVELOPMENT OF BGS COST AND  
BID FACTORS**

(Pages 1 through 7)

**Public Service Electric and Gas Company Specific Addendum  
Attachment 2**

**Development of BGS-RSCP Cost and Bid Factors for 2019/2020 BGS Filing  
Adjusted to Billing Time Periods**

**Table #1**

**% Usage During PJM On-Peak Period**

*Based on average of year 2015,2016 & 2017 Load Profile Information  
On-Peak periods defined as the 16 hr PJM Trading period, adj for NERC holidays*

	<i>Profile Meter</i>	<i>Profile Meter</i>	<i>Profile Meter</i>	<i>Profile Meter</i>	<i>Profile</i>	<i>Profile</i>	<i>--- Other Analysis ---</i>		<i>Profile Meter</i>	<i>Profile Meter</i>
	<i>Data</i>	<i>Data</i>	<i>Data</i>	<i>Data</i>	<i>Meter Data</i>	<i>Meter Data</i>	<i>PSAL</i>	<i>BPL</i>	<i>Data</i>	<i>Data</i>
<i>(data rounded to nearest .01%)</i>	<b>RS</b>	<b>RHS</b>	<b>RLM</b>	<b>WH</b>	<b>WHS</b>	<b>HS</b>			<b>GLP</b>	<b>LPL-S</b>
January	46.23%	45.97%	47.43%	44.77%	44.77%	45.93%	29.53%	29.53%	54.87%	52.50%
February	49.83%	48.47%	50.83%	48.10%	48.10%	47.87%	29.73%	29.73%	57.47%	55.47%
March	50.03%	49.30%	51.40%	48.67%	48.67%	47.57%	26.30%	26.30%	58.60%	56.60%
April	49.00%	49.70%	50.27%	46.80%	46.80%	48.50%	22.23%	22.23%	57.73%	55.77%
May	48.33%	49.40%	49.83%	45.97%	45.97%	55.47%	20.57%	20.57%	57.50%	55.30%
June	53.83%	54.47%	55.63%	50.80%	50.80%	63.73%	20.70%	20.70%	61.87%	58.87%
July	50.77%	51.27%	52.40%	48.50%	48.50%	60.57%	18.90%	18.90%	58.23%	54.43%
August	52.57%	53.47%	54.80%	52.27%	52.27%	62.57%	21.87%	21.87%	60.93%	56.70%
September	50.50%	51.83%	52.73%	49.67%	49.67%	61.73%	23.40%	23.40%	59.33%	55.97%
October	49.10%	51.03%	51.17%	49.70%	49.70%	54.60%	26.53%	26.53%	58.57%	56.23%
November	47.40%	47.70%	49.77%	46.07%	46.07%	48.17%	30.60%	30.60%	56.47%	54.23%
December	47.30%	47.13%	49.17%	45.80%	45.80%	46.60%	30.83%	30.83%	55.07%	52.57%

**Table #2**

**% Usage During PSE&G On-Peak Billing Period**

*Based on average of year 2015,2016 & 2017 Load Profile Information  
On-Peak periods as defined in specified rate schedule (average of %s for 2015,2016 & 2017)*

	<i>N/A</i>	<i>N/A</i>	<i>Data</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>	<i>Profile Meter</i>
	<b>RS</b>	<b>RHS</b>	<b>RLM</b>	<b>WH</b>	<b>WHS</b>	<b>HS</b>	<b>PSAL</b>	<b>BPL</b>	<b>GLP</b>	<b>Data</b>
<i>(data rounded to nearest .01%)</i>										<b>LPL-S</b>
January	0%	0%	43%	0%	0%	0%	0%	0%	0%	48%
February	0%	0%	42%	0%	0%	0%	0%	0%	0%	48%
March	0%	0%	42%	0%	0%	0%	0%	0%	0%	48%
April	0%	0%	42%	0%	0%	0%	0%	0%	0%	49%
May	0%	0%	44%	0%	0%	0%	0%	0%	0%	50%
June	0%	0%	46%	0%	0%	0%	0%	0%	0%	51%
July	0%	0%	48%	0%	0%	0%	0%	0%	0%	51%
August	0%	0%	48%	0%	0%	0%	0%	0%	0%	50%
September	0%	0%	48%	0%	0%	0%	0%	0%	0%	51%
October	0%	0%	46%	0%	0%	0%	0%	0%	0%	51%
November	0%	0%	44%	0%	0%	0%	0%	0%	0%	50%
December	0%	0%	43%	0%	0%	0%	0%	0%	0%	49%

**Public Service Electric and Gas Company Specific Addendum  
Attachment 2**

**Table #3 Class Usage @ customer**

*Calendar month sales forecasted for 2019, less % for LPL-Sec > 500 kW Peak Load Share in MWh*

	RS	RHS	RLM	WH	WHS	HS	PSAL	BPL	GLP	< 500 kW LPL-S
January	1,041,225	17,826	18,171	110	2	1,933	17,199	31,648	537,793	402,208
February	878,745	14,701	14,905	107	2	1,811	13,165	28,407	508,853	374,782
March	860,013	12,860	15,256	104	2	1,570	14,162	24,439	532,389	389,810
April	707,010	7,621	11,573	89	3	756	11,664	21,743	467,824	341,467
May	795,979	5,355	13,778	101	1	419	10,502	25,431	489,949	396,804
June	1,234,664	6,891	21,697	89	2	653	9,790	18,792	575,091	406,028
July	1,594,715	7,604	27,194	73	1	749	9,988	15,816	644,640	462,383
August	1,479,267	7,099	26,306	69	1	719	11,339	22,714	641,154	456,420
September	1,038,765	5,551	18,830	66	1	610	11,966	21,369	538,741	382,625
October	798,040	6,832	13,865	84	1	808	14,720	24,732	512,864	397,553
November	763,767	8,838	12,245	80	1	941	14,692	28,357	454,551	356,643
December	986,437	13,319	15,713	88	2	1,461	16,661	31,646	522,007	394,152
Total	12,178,626	114,497	209,534	1,060	19	12,429	155,848	295,094	6,425,854	4,760,876

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

*in \$/MWh, not including PJM losses*

	On-Peak	Off/On Pk LMP ratio	Resulting Off-Peak
January	48.05	0.7756	37.268
February	45.15	0.7756	35.019
March	36.43	0.7756	28.256
April	31.50	0.7756	24.432
May	31.55	0.7756	24.471
June	32.48	0.6401	20.792
July	38.27	0.6401	24.498
August	35.67	0.6401	22.834
September	32.53	0.6401	20.824
October	31.45	0.7756	24.393
November	31.43	0.7756	24.378
December	34.28	0.7756	26.588

**Table #5 Zone to Western Hub Basis Differential**

On-Peak	Off-Peak	
95%	95%	<i>NYMEX Forwards (June 1, 2018) from NERA</i>
95%	95%	
95%	95%	<i>Congestion Factors &amp; On/Off Peak Ratios</i>
95%	95%	<i>Summer Averages for June 2015-Sept 2017</i>
95%	95%	<i>Winter Averages for March 2015-Feb 2018</i>
93%	86%	
93%	86%	
93%	86%	
95%	95%	
95%	95%	
95%	95%	

**Table #6 Losses**

	RS	RHS	RLM	WH	WHS	HS	PSAL	BPL	GLP	LPL-S
<i>from meter to bulk system (includes Delivery &amp; PJM EHV losses)</i>										
Loss Factors =	7.9593%	7.9593%	7.9593%	7.9593%	7.9593%	7.9593%	7.9593%	7.9593%	7.9593%	7.9593%
Expansion Factor =	1.086476	1.086476	1.086476	1.086476	1.086476	1.086476	1.086476	1.086476	1.086476	1.086476
1 / Expansion Factor =	0.920407	0.920407	0.920407	0.920407	0.920407	0.920407	0.920407	0.920407	0.920407	0.920407
<i>from meter to transmission node (includes Delivery less mean hourly PJM marginal losses)</i>										
Loss Factors =	6.9966%	6.9966%	6.9966%	6.9966%	6.9966%	6.9966%	6.9966%	6.9966%	6.9966%	6.9966%
Expansion Factor =	1.075230	1.075230	1.075230	1.075230	1.075230	1.075230	1.075230	1.075230	1.075230	1.075230
1 / Expansion Factor =	0.930034	0.930034	0.930034	0.930034	0.930034	0.930034	0.930034	0.930034	0.930034	0.930034



**Public Service Electric and Gas Company Specific Addendum  
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**Table #7** **Summary of Average BGS Energy Only Unit Costs @ customer - PJM Time Periods**  
based on Forwards prices corrected for congestion & all losses - PJM time periods  
in \$/MWh

		RS	RHS	RLM	WH	WHS	HS	PSAL	BPL	GLP	LPL-S
Summer - all hrs	\$	28.57	\$ 28.56	\$ 28.81	\$ 27.98	\$ 27.69	\$ 29.88	\$ 23.85	\$ 23.80	\$ 29.57	\$ 29.06
	PJM on pk	\$ 35.49	\$ 35.33	\$ 35.44	\$ 35.04	\$ 34.67	\$ 35.30	\$ 34.96	\$ 34.87	\$ 35.28	\$ 35.28
	PJM off pk	\$ 21.09	\$ 21.00	\$ 21.07	\$ 20.82	\$ 20.60	\$ 21.00	\$ 20.84	\$ 20.78	\$ 20.98	\$ 21.00
Winter - all hrs	\$	33.53	\$ 34.90	\$ 33.75	\$ 33.41	\$ 33.52	\$ 35.11	\$ 31.64	\$ 31.66	\$ 33.94	\$ 33.66
	PJM on pk	\$ 37.92	\$ 39.40	\$ 37.97	\$ 37.90	\$ 38.04	\$ 39.57	\$ 38.15	\$ 38.21	\$ 37.53	\$ 37.42
	PJM off pk	\$ 29.43	\$ 30.72	\$ 29.54	\$ 29.43	\$ 29.53	\$ 30.96	\$ 29.17	\$ 29.19	\$ 29.19	\$ 29.10
Annual	\$	31.35	\$ 33.40	\$ 31.53	\$ 31.89	\$ 31.99	\$ 33.96	\$ 29.49	\$ 29.56	\$ 32.31	\$ 32.01
System Total	\$	31.72									

**Table #8** **Summary of Average BGS Energy Only Costs @ customer - PJM Time Periods**  
based on Forwards prices corrected for congestion & all losses  
in \$1000

		RS	RHS	RLM	WH	WHS	HS	PSAL	BPL	GLP	LPL-S
Summer - all hrs	\$	152,756	\$ 775	\$ 2,709	\$ 8	\$ 0	\$ 82	\$ 1,028	\$ 1,873	\$ 70,959	\$ 49,613
	PJM on pk	\$ 98,535	\$ 506	\$ 1,796	\$ 5	\$ 0	\$ 60	\$ 321	\$ 588	\$ 50,853	\$ 33,993
	PJM off pk	\$ 54,221	\$ 269	\$ 914	\$ 3	\$ 0	\$ 22	\$ 706	\$ 1,285	\$ 20,106	\$ 15,620
Winter - all hrs	\$	229,068	\$ 3,048	\$ 3,898	\$ 25	\$ 0	\$ 341	\$ 3,568	\$ 6,851	\$ 136,668	\$ 102,780
	PJM on pk	\$ 125,170	\$ 1,658	\$ 2,189	\$ 14	\$ 0	\$ 185	\$ 1,183	\$ 2,265	\$ 86,163	\$ 62,630
	PJM off pk	\$ 103,898	\$ 1,391	\$ 1,710	\$ 12	\$ 0	\$ 155	\$ 2,385	\$ 4,586	\$ 50,506	\$ 40,150
Annual	\$	381,824	\$ 3,824	\$ 6,608	\$ 34	\$ 1	\$ 422	\$ 4,596	\$ 8,724	\$ 207,627	\$ 152,393
System Total	\$	766,052									

**Table #9** **Summary of Average BGS Energy Only Unit Costs @ customer - PSE&G Time Periods**  
based on Forwards prices corrected for congestion & all losses - PSE&G billing time periods  
in \$/MWh

		RS	RHS	RLM	WH	WHS	HS	PSAL	BPL	GLP	LPL-S
Summer - all hrs	\$	28.57	\$ 28.56	\$ 28.81	\$ 27.98	\$ 27.69	\$ 29.88	\$ 23.85	\$ 23.80	\$ 29.57	\$ 29.06
	PSE&G On pk			\$ 36.34							\$ 36.09
	PSE&G Off pk			\$ 21.90							\$ 21.83
Winter - all hrs	\$	33.53	\$ 34.90	\$ 33.75	\$ 33.41	\$ 33.52	\$ 35.11	\$ 31.64	\$ 31.66	\$ 33.94	\$ 33.66
	PSE&G On pk			\$ 38.62							\$ 37.89
	PSE&G Off pk			\$ 30.04							\$ 29.55
Annual Average	\$	31.35	\$ 33.40	\$ 31.53	\$ 31.89	\$ 31.99	\$ 33.96	\$ 29.49	\$ 29.56	\$ 32.31	\$ 32.01
System Average	\$	31.72									

**Public Service Electric and Gas Company Specific Addendum  
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**Table #10 Generation & Transmission Obligations and Costs and Other Adjustments**  
obligations - Peak Load shares eff 1/1/18, scaling factors eff 6/1/18, Transmission Loads eff 1/1/18; costs are market estimates  
in MW

	RS	RHS	RLM	WH	WHS	HS	PSAL	BPL	GLP	Adj for PLS > 500 kW LPL-S
Gen Obl - MW	4,541.1	26.1	86.0	0.0	0.0	3.3	0.0	0.0	2,083.3	1,025.9
Trans Obl - MW	3,751.3	21.8	71.9	0.0	0.0	2.8	0.0	0.0	1,809.0	879.4
# of Months and Days used in this analysis		# of summer days = # of winter days =	122 243	# of summer months = # of winter months =	4 8					
Transmission Cost	year round =	\$97,911.84 per MW-yr								
Generation Capacity cost		Base Capacity	Total Capacity							
	summer = \$	158.09	\$ 158.09	\$/MW/day						
	winter = \$	158.09	\$ 158.09	\$/MW/day						
<u>% usage in Summer Blocks</u>	RS	RHS								
Block 1 (0-600 kWh/m)	64.7%	63.3%	(based on W/N actuals used in settlement and final rate design of 2009 Rate Case, rounded to .1%)							
Block 2 (>600 kWh/m)	35.3%	36.7%								
Required summer inversion =	0.8652	1.1569	¢/kWh (same as 2003/2004 BGS blocking inversion)							

**Table #11 Ancillary Services & Renewable Power Cost**

Ancillary Services	\$	2.00
Renewable Power Cost	\$	19.17
Total Ancillary Services & Renewable Power Costs	\$	21.17 per MWh @ bulk system

**Table #12 Summary of Obligation Costs Expressed as \$/MWh @ customer (for non-demand rates only)**

	RS	RHS	RLM	WH	WHS	HS	PSAL	BPL
Transmission Obl - all months	\$ 30.16	\$ 18.64	\$ 74.15	\$ -	\$ -	\$ 22.06	\$ -	\$ -
Generation Obl -								
per annual MWh	\$ 21.52	\$ 13.15	\$ 52.27	\$ -	\$ -	\$ 15.32	\$ -	\$ -
recovery per summer MWh	\$ 16.38	\$ 18.54	\$ 36.84	\$ -	\$ -	\$ 23.31	\$ -	\$ -
recovery per winter MWh	\$ 25.54	\$ 11.48	\$ 66.18	\$ -	\$ -	\$ 13.07	\$ -	\$ -
			For RLM, per on-peak kWh only					

**Public Service Electric and Gas Company Specific Addendum  
Attachment 2**

**Table #13 Summary of BGS Unit Costs @ customer**

**NON-DEMAND RATES**

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

		RS	RHS	RLM	WH	WHS	HS	PSAL	BPL
Summer - all hrs	\$	103.24	\$ 83.36		\$ 50.98	\$ 50.69	\$ 90.26	\$ 46.85	\$ 46.80
	PSE&G On pk			\$ 185.77					
	PSE&G Off pk			\$ 44.90					
	Block 1 (0-600 kWh/m)	\$ 100.19	\$ 79.11						
	Block 2 (>600 kWh/m)	\$ 108.84	\$ 90.68						
Winter - all hrs	\$	108.21	\$ 89.69		\$ 56.41	\$ 56.52	\$ 95.49	\$ 54.64	\$ 54.66
	PSE&G On pk			\$ 188.05					
	PSE&G Off pk			\$ 53.04					
Annual -all hrs	\$	106.03	\$ 88.19	\$ 111.82	\$ 54.89	\$ 54.99	\$ 94.34	\$ 52.49	\$ 52.56

**DEMAND RATES**

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

		GLP	LPL-S		PLUS:	GLP	LPL-S
Summer - all hrs	\$	52.57	\$ 52.06		<u>Gen Cost</u>		
	PSE&G On pk		\$ 59.09		summer	\$ 4.8219	\$ 4.8219 per kW of G obl /month
	PSE&G Off pk		\$ 44.83		winter	\$ 4.8021	\$ 4.8021 per kW of G obl /month
					annual	\$ 4.8087	\$ 4.8087 per kW of G obl /month
Winter - all hrs	\$	56.95	\$ 56.66		<u>Trans cost</u>		
	PSE&G On pk		\$ 60.89		all months	\$ 8.1593	\$ 8.1593 per kW of T obl /month
	PSE&G Off pk		\$ 52.55				
Annual - all hrs per MWh only	\$	55.31	\$ 55.01				

Including T&G Obligation \$

Summer - all hrs	\$	93.88	\$ 80.42	Note: Obligation \$ included in On pk costs
	PSE&G On pk		\$ 115.05	
	PSE&G Off pk		\$ 44.83	
Winter - all hrs	\$	106.18	\$ 88.39	
	PSE&G On pk		\$ 125.26	
	PSE&G Off pk		\$ 52.55	
Annual - including T&G Obl \$	\$	101.58	\$ 85.53	

**ALL RATES**

Grand Total Cost in \$1000 = \$ 2,409,692  
 All-In Average cost @ customer = \$ 99.76 per MWh at customer (per customer metered MWh)  
 All-In Average costs @ transmission nodes = \$ 92.78 per MWh at transmission nodes (per metered MWh at transmission node)

**Public Service Electric and Gas Company Specific Addendum  
Attachment 2**

**Table #14** Ratio of BGS Unit Costs @ customer to All-In Average Cost @ transmission nodes - rounded to 3 decimal places, unit obligation \$ rounded to 4 decimal places

**NON-DEMAND RATES**

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

		RS	RHS	RLM	WH	WHS	HS	PSAL	BPL
Summer - all hrs					0.549	0.546	0.973	0.505	0.504
	PSE&G On pk			2.002					
	PSE&G Off pk			0.484					
	<b>All usage Multiplier</b>	1.113	0.898						
	<b>Constant (in \$/MWh) \$</b>	<b>(3.054)</b>	<b>\$ (4.246)</b>						
	<b>Constant (in \$/MWh) \$</b>	<b>5.598</b>	<b>\$ 7.323</b>						
								Use weighted average for all streetlighting =	0.504
Winter - all hrs		1.166	0.967		0.608	0.609	1.029	0.589	0.589
	PSE&G On pk			2.027					
	PSE&G Off pk			0.572					
								Use weighted average for all streetlighting =	0.589
Annual - all hrs		1.143	0.951	1.205	0.592	0.593	1.017	0.566	0.567

**DEMAND RATES**

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

		GLP Multiplier	GLP Constant (in \$/MWh)	LPL-S Multiplier	LPL-S Constant (in \$/MWh)	PLUS:
Summer - all hrs		1.012	(41.303)			
	PSE&G On pk			1.240	(55.967)	<u>Gen Cost</u>
	PSE&G Off pk			0.483	-	summer \$ 4.8219 \$ 4.8219 per kW of G obl /month
						winter \$ 4.8021 \$ 4.8021 per kW of G obl /month
						annual \$ 4.8087 \$ 4.8087 per kW of G obl /month
Winter - all hrs		1.144	(49.233)			
	PSE&G On pk			1.350	(64.373)	<u>Trans cost</u>
	PSE&G Off pk			0.566	-	all months \$ 8.1593 \$ 8.1593 per kW of T obl /month
Annual - including T&G Obl \$		1.095		0.922		

**Assumptions:**

Gen Cost = \$ 158.09 /MW day summer  
 \$ 158.09 /MW day winter

Trans cost = \$ 97,911.84 per MW-yr  
 Analysis time period = 4 summer months  
 8 winter months

Ancillary Services & RPS = \$ 21.17 per MWh  
 Energy Costs = based on Forwards @ PJM West - corrected for congestion  
 Usage patterns = forecasted 2018 energy use by class, PJM and PSE&G on/off % from 2015, 2016 & 2017 class load profiles

Obligations = class totals in effect as of filing date  
 Losses = Delivery losses from tariff, PJM losses based on 3 year average %  
 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  
 PSE&G Billing time periods = as per specific rate schedule  
 NJ SUT (Sales & Use Tax) = SUT excluded from all rates

**Public Service Electric and Gas Company Specific Addendum  
Attachment 2**

**Table #15 Summary of Total BGS Costs by Season**

	RS	RHS	RLM	WH	WHS	HS	PSAL	BPL	GLP	LPL-S
Total Costs by Rate - in \$1000										
Summer	\$ 552,080	\$ 2,263	\$ 10,564	\$ 15	\$ 0	\$ 247	\$ 2,019	\$ 3,682	\$ 225,375	\$ 137,374
Winter	\$ 739,198	\$ 7,835	\$ 12,866	\$ 43	\$ 1	\$ 926	\$ 6,162	\$ 11,829	\$ 427,390	\$ 269,825
Total	\$ 1,291,278	\$ 10,098	\$ 23,429	\$ 58	\$ 1	\$ 1,173	\$ 8,180	\$ 15,511	\$ 652,764	\$ 407,199
% of Annual Total \$ by Rate										
Summer	43%	22%	45%	26%	24%	21%	25%	24%	35%	34%
Winter	57%	78%	55%	74%	76%	79%	75%	76%	65%	66%
Total Costs - in \$1000										
Summer	\$ 933,619									
Winter	\$ 1,476,074									
Total	\$ 2,409,692									
% of Annual Total \$										
Summer	39%		\$ 89.51	per MWh @ trans nodes			Ratio to All-In Cost >>>		Summer	1.0000
Winter	61%		\$ 94.98	per MWh @ trans nodes					Winter	1.0000

*rounded to 4 decimal places*

**Table #16 Spreadsheet Error Checking - Reconciliation of Customer Revenue and Supplier Payments, based on above data only**

Assumed Winning Bid Price =	\$ 92.78	<i>(bid includes payments for all losses)</i>
Payment Ratio - Summer =	1.0000	
Payment Ratio - Winter =	1.0000	

	RS	RHS	RLM	WH	WHS	HS	PSAL	BPL	GLP	LPL-S
Total Rate Revenue - in \$1000										
Summer	\$ 552,222	\$ 2,262	\$ 10,564	\$ 15	\$ 0	\$ 247	\$ 2,015	\$ 3,680	\$ 225,430	\$ 137,357
Winter	\$ 739,045	\$ 7,837	\$ 12,869	\$ 43	\$ 1	\$ 926	\$ 6,163	\$ 11,826	\$ 427,256	\$ 269,762
Total	\$ 1,291,266	\$ 10,099	\$ 23,433	\$ 58	\$ 1	\$ 1,173	\$ 8,177	\$ 15,506	\$ 652,686	\$ 407,119
Total Summer	\$ 933,791									
Total Winter	\$ 1,475,729									
Grand Total	\$ 2,409,519									
Total Supplier Payment - in \$1000										
Summer	\$ 533,481	\$ 2,708	\$ 9,381	\$ 30	\$ 0	\$ 272	\$ 4,298	\$ 7,851	\$ 239,397	\$ 170,343
Winter	\$ 681,512	\$ 8,715	\$ 11,523	\$ 76	\$ 1	\$ 968	\$ 11,250	\$ 21,589	\$ 401,674	\$ 304,623
Total	\$ 1,214,993	\$ 11,423	\$ 20,904	\$ 106	\$ 2	\$ 1,240	\$ 15,548	\$ 29,440	\$ 641,071	\$ 474,966
Total Summer	\$ 967,761									
Total Winter	\$ 1,441,931									
Grand Total	\$ 2,409,692									

Difference ( in \$1000) = \$ (173)

Note: Minor differences in totals are due to rounding of Bid Factors and Payment Factors

**Table #17 Total Supplier Energy  
in MWh**

*@ transmission nodes*

Summer	10,430,236
Winter	<u>15,540,695</u>
Total	25,970,931

**VII. ATTACHMENT 3 - SPREADSHEETS FOR THE CALCULATION OF BGS RATES**

(Pages 1 through 6)

**Calculation of June 2019 to May 2020 BGS-RSCP Rates**

*Illustrative Purposes Only*  
*NJ Sales & Use Tax (SUT) excluded*

**Table A Auction Results**

line #	Specific BGS-RSCP Auction >>	remaining portion of 36 month bid - 2017 auction	remaining portion of 36 month bid - 2018 auction	36 month bid - 2019 auction	Notes:
1	<b>Winning Bid - in \$/MWh</b>	\$ 90.78	\$ 91.77	\$ 91.77	Winning Bid - 2018 Illustrative Purposes Only
	<b>Total - in \$/MWh</b>	\$ 90.78	\$ 91.77	\$ 91.77	
	<i>(includes all payments, including impact of PJM marginal losses)</i>				
2	<b># of Tranches for Bid</b>	28	29	28	from then current Bid
3	<b>Total # of Tranches</b>	85	85	85	from then current Bid
	<b>Payment Factors</b>				
4	Summer	1.0000	1.0000	1.0000	
5	Winter	1.0000	1.0000	1.0000	
	<b>Applicable Customer Usage @ transmission nodes - in MWh</b>				
6	Summer MWh	10,430,236			from Table #17 of the current Bid Factor Spreadsheet
7	Winter MWh	15,540,695			
	<b>Total Payment to Suppliers - in \$1000</b>				
8	Summer	\$ 311,906	\$ 326,568	\$ 315,307	= (1) * (2)/(3) * (4) * (6) + (1A) * (2)/(3) * (6)
9	Winter	\$ 464,729	\$ 486,575	\$ 469,797	= (1) * (2)/(3) * (5) * (7) + (1A) * (2)/(3) * (7)
10	Total	\$ 776,635	\$ 813,144	\$ 785,104	Note: \$ reflect total payment
	<b>Average Payment to Suppliers - in \$/MWh</b>				
11	Summer	\$ 91.444			= sum(line 8) / (6) - rounded to 3 decimal places
12	Winter	\$ 91.444			= sum(line 9) / (7) - rounded to 3 decimal places
13	Total weighted average	\$ 91.444	<<< used in calculation of Customer Rates		= sum(line 10) / [(6) + (7)] rounded to 3 decimal places
	<b>Reconciliation of amounts - in \$1000</b>				
14	Weighted Average * Total MWh =	\$ 2,374,886			= (13) * [(6)+(7)] / 1000
15	Total Payment to Suppliers =	\$ 2,374,883			= sum (line 10)
16	Difference =	\$ 3			= line (14) - line (15)

**Calculation of June 2019 to May 2020 BGS-RSCP Rates**

*Illustrative Purposes Only*  
*NJ Sales & Use Tax (SUT) excluded*

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

*from Table #14 of the bid factor spreadsheet ---  
rounded to 3 decimal places, unit obligation \$ rounded to 4 decimal places*

**NON-DEMAND RATES**

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

	RS	RHS	RLM	WH	WHS	HS	PSAL	BPL
Summer - all hrs				0.549	0.546	0.973	0.505	0.504
PSE&G On pk			2.002					
PSE&G Off pk			0.484					
							Use weighted average for all streetlighting =	0.504
<b>All usage Multiplier</b>	1.113	0.898						
<b>Constant (in \$/MWh) \$</b>	(3.054)	(4.246)						
<b>Constant (in \$/MWh) \$</b>	5.598	7.323						
Winter - all hrs	1.166	0.967		0.608	0.609	1.029	0.589	0.589
PSE&G On pk			2.027					
PSE&G Off pk			0.572					
							Use weighted average for all streetlighting =	0.589
Annual - all hrs	1.143	0.951	1.205	0.592	0.593	1.017	0.566	0.567

**DEMAND RATES**

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

	GLP Multiplier	GLP Constant (in \$/MWh)	LPL-S Multiplier	LPL-S Constant (in \$/MWh)	PLUS:	GLP	LPL-S
Summer - all hrs	1.012	(41.303)					
PSE&G On pk			1.240	(55.967)	<u>Gen Cost</u>		
PSE&G Off pk			0.483	-	summer \$	4.8087	\$ 4.8087 per kW of G obl /month
					winter \$	4.8087	\$ 4.8087 per kW of G obl /month
Winter - all hrs	1.144	(49.233)			<u>Trans cost</u>		
PSE&G On pk			1.350	(64.373)	all months \$	8.1593	\$ 8.1593 per kW of T obl /month
PSE&G Off pk			0.566	-			
Annual - including T&G Obl \$	1.095		0.922				



**Calculation of June 2019 to May 2020 BGS-RSCP Rates**

*Illustrative Purposes Only*  
*NJ Sales & Use Tax (SUT) excluded*

**Table C Preliminary Resulting BGS Rates (in cents per kWh) - equal to bid factors times weighted average bid price rounded to 4 decimal places**

**NON-DEMAND RATES**

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

	RS	RHS	RLM	WH	WHS	HS	PSAL	BPL
Summer - all hrs				5.0203	4.9928	8.8975	4.6088	4.6088
	PSE&G On pk		18.3071					
	PSE&G Off pk		4.4259					
for Block 1 (0-600 kWh/m) usage	9.8723	7.7871						
for Block 2 (>600 kWh/m) usage	10.7375	8.9440						
Winter - all hrs	10.6624	8.8426		5.5598	5.5689	9.4096	5.3861	5.3861
	PSE&G On pk		18.5357					
	PSE&G Off pk		5.2306					

**DEMAND RATES**

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

	GLP	LPL-S	PLUS:	GLP	LPL-S
Summer - all hrs	5.1238		<u>Gen Cost</u>		
	PSE&G On pk	5.7424	summer	\$ 4.8087	\$ 4.8087 per kW of G obl /month
	PSE&G Off pk	4.4167	winter	\$ 4.8087	\$ 4.8087 per kW of G obl /month
Winter - all hrs	5.5379		<u>Trans cost</u>		
	PSE&G On pk	5.9076	all months	\$ 8.1593	\$ 8.1593 per kW of T obl /month
	PSE&G Off pk	5.1757			

**Calculation of June 2019 to May 2020 BGS-RSCP Rates**

*Illustrative Purposes Only*  
*NJ Sales & Use Tax (SUT) excluded*

**Table D** Revenue Recovery Calculations - Reconciliation of seasonal Customer Revenue and Supplier Payments, based on actual anticipated revenues and payments

	RS	RHS	RLM	WH	WHS	HS	PSAL	BPL
Total Preliminary Rate Revenue - in \$1000								
Summer	\$ 544,244	\$ 2,229	\$ 10,411	\$ 15	\$ 0	\$ 243	\$ 1,986	\$ 3,627
Winter	\$ 728,372	\$ 7,724	\$ 12,683	\$ 42	\$ 1	\$ 913	\$ 6,074	\$ 11,656
Total	\$ 1,272,616	\$ 9,953	\$ 23,095	\$ 57	\$ 1	\$ 1,156	\$ 8,059	\$ 15,282

	GLP Energy \$	GLP Obligation \$	LPL-S Energy \$	LPL-S Obligation \$
Summer	\$ 122,952	\$ 99,113	\$ 86,886	\$ 48,434
Winter	\$ 222,969	\$ 198,225	\$ 169,049	\$ 96,868
Total	\$ 345,921	\$ 297,338	\$ 255,935	\$ 145,302

	Energy \$	Obligation \$	Total \$
Total Summer	\$ 772,593	\$ 147,547	\$ 920,139
Total Winter	\$ 1,159,482	\$ 295,093	\$ 1,454,576
Grand Total	\$ 1,932,075	\$ 442,640	\$ 2,374,715

Total Supplier Payment - in \$1000	
Summer	\$ 953,781
Winter	\$ 1,421,101
Total	\$ 2,374,883

Differences - in \$1000	
Summer	\$ 33,642
Winter	\$ (33,474)
Total	\$ 168

kWh Rate	
Adjustment	<i>rounded to 5 decimal places</i>
Factors	
	1.04354
	0.97113

Note: These differences are due to rounding and seasonal differences in Bidder Payments (which are based on prior winning bids and Seasonal Payment Factors) and current Rates (based on current seasonal market differentials)

**Calculation of June 2019 to May 2020 BGS-RSCP Rates**

*Illustrative Purposes Only*  
*NJ Sales & Use Tax (SUT) excluded*

**Table E** **Final Resulting BGS Rates from Auctions (in cents per kWh) - with preliminary kWh rates adjusted by the kWh Rate Adjustment Factor**  
*rounded to 4 decimal places*

**NON-DEMAND RATES**

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

		RS	RHS	RLM	WH	WHS	HS	PSAL	BPL
Summer - all hrs					5.2389	5.2102	9.2849	4.8095	4.8095
	PSE&G On pk			19.1042					
	PSE&G Off pk			4.6186					
for Block 1 (0-600 kWh/m) usage		10.3021	8.1262						
for Block 2 (>600 kWh/m) usage		11.2050	9.3334						
Winter - all hrs		10.3546	8.5873		5.3993	5.4081	9.1379	5.2306	5.2306
	PSE&G On pk			18.0006					
	PSE&G Off pk			5.0796					

**DEMAND RATES**

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

		GLP	LPL-S	PLUS:	GLP	LPL-S
Summer - all hrs		5.3469		<u>Gen Cost</u>		
	PSE&G On pk		5.9924	summer	\$4.8087	\$4.8087
	PSE&G Off pk		4.6090	winter	\$4.8087	\$4.8087
Winter - all hrs		5.3780		<u>Trans cost</u>		
	PSE&G On pk		5.7370	all months	\$8.1593	\$8.1593
	PSE&G Off pk		5.0263			

**Calculation of June 2019 to May 2020 BGS-RSCP Rates**

*Illustrative Purposes Only*  
*NJ Sales & Use Tax (SUT) excluded*

**Table F Spreadsheet Error Checking** - Checking of seasonal Customer Revenue and Supplier Payments, based on final actual anticipated revenues and payments

	RS	RHS	RLM	WH	WHS	HS	PSAL	BPL	GLP	LPL-S	
Total Rate Revenue - in \$1000											
Summer	\$	567,939	\$ 2,326	\$ 10,864	\$ 16	\$ 0	\$ 254	\$ 2,072	\$ 3,785	\$ 227,418	\$ 139,103
Winter	\$	707,345	\$ 7,501	\$ 12,317	\$ 41	\$ 1	\$ 886	\$ 5,898	\$ 11,319	\$ 414,756	\$ 261,037
Total	\$	1,275,284	\$ 9,827	\$ 23,182	\$ 57	\$ 1	\$ 1,140	\$ 7,970	\$ 15,104	\$ 642,174	\$ 400,140
Total Summer	\$	953,776									
Total Winter	\$	1,421,102									
Grand Total	\$	2,374,878									
Total Supplier Payment - in \$1000											
Summer	\$	953,781									
Winter	\$	1,421,101									
Total	\$	2,374,883									
Differences - in \$1000											
Summer	\$	(5)									<u>% difference</u>
Winter	\$	0									-0.0005%
Total	\$	(5)									0.0000%
											-0.0002%