## STATE OF NEW JERSEY BOARD OF PUBLIC UTILITIES

## IN THE MATTER OF THE PROVISION OF BASIC GENERATION SERVICE FOR THE PERIOD BEGINNING JUNE 1, 2020

Docket No. ER19040428

## **ROCKLAND ELECTRIC COMPANY**

## PROPOSAL FOR BASIC GENERATION SERVICE REQUIREMENTS TO BE PROCURED EFFECTIVE JUNE 1, 2020

## COMPANY SPECIFIC ADDENDUM COMPLIANCE FILING

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### **RECO's COMPANY SPECIFIC ADDENDUM**

## A. Introduction to RECO's Company Specific Filing

In its Decision and Order dated April 18, 2019 in Docket ER19040428, the New Jersey Board of Public Utilities ("Board" or "NJBPU") directed New Jersey's four investor owned electric distribution companies ("EDCs") to file proposals with the Board by no later than July 1, 2019 on the procurement of basic generation service ("BGS") for the period beginning June 1, 2020. This document constitutes the company-specific portion of the compliance filing for Rockland Electric Company ("RECO" or the "Company") mandated by the Board. RECO's filing also includes and incorporates by reference the Proposal for BGS Requirements to be Procured Effective June 1, 2020, filed by New Jersey's four EDCs on July 1, 2019 ("EDC Compliance Filing").

## **B.** Use of Committed Supply

"Committed Supply" means any and all power supplies to which the EDCs have an existing physical or financial entitlement that may extend into or through the BGS bid period. This will include Non-Utility Generation ("NUG") contracts, including any restructured replacement power contracts; any wholesale purchases previously contracted for by the EDCs, and any generation assets, or options for/calls upon assets, still owned or under contract to the EDCs. RECO has no Committed Supply.

## C. **RECO Tranche Configuration**

In its Decision and Order issued June 18, 2012 in Docket No. ER12020150, the Board lowered the threshold for the BGS-CIEP class to include all commercial and industrial customers with a peak load share of 500 kW and greater.<sup>1</sup> RECO continues to comply with this directive and will include these customers as one tranche (at 56.2 MW of BGS-CIEP eligible load per tranche) in the BGS-CIEP Auction.

As to the BGS-RSCP Auction, RECO currently has two 36-month tranches that terminate on May 31, 2020, one 36-month tranche that terminates on May 31, 2021, and one 36-month tranche that terminates on May 31, 2022. Accordingly, since the load requirements of RECO's Eastern Division are comprised of a total of four tranches, in the BGS-RSCP Auction for the period commencing June 1, 2020, RECO will include two 36-month tranches (for the period June 1, 2020 through May 31, 2023).

## **D.** Contingency Plans

While not every contingency can be anticipated, the following three contingencies are of particular concern:

- (a) The Auction Process fails to provide 100 percent of RECO's BGS Load (i.e., an insufficient number of bids to provide for a fully subscribed auction volume);
- (b) A default by one of the winning bidders prior to June 1, 2020; and
- (c) A default during the supply period.

The three contingencies are discussed further below:

(a) Insufficient Number of Bids

A viable Auction Process requires a sufficient degree of competition. To

encourage a sufficient degree of competition, the volume of BGS power purchased at the

<sup>&</sup>lt;sup>1</sup> In accordance with the Board's December 8, 2005 Decision and Order (see footnote 13, at page 16), RECO will determine all eligibility criteria by measuring when a customer's billing demand exceeds the eligibility level during any two months of a calendar year. (footnote continued...)

Auction will be finally decided after the receipt of first round bids. Provided that there are sufficient bids at the starting price, the Auction will be held for 100 percent of the BGS Load<sup>2</sup> (i.e., both BGS-RSCP and BGS-CIEP).

It is possible, however, that the amount of initial bids will not result in a competitive auction for 100 percent of the BGS Load. Any determination to reduce the percentage of BGS Load included in the Auction Process will be made by the Auction Manager, in consultation with the EDCs and the NJBPU advisor. It is also possible that none of RECO's BGS Load tranches will be bid upon even at the starting price.

In the event that the Auction Volume is reduced to less than 100 percent of BGS Load, or there are unsubscribed tranches at the end of the Auction, each EDC will implement a contingency plan for the remaining tranches. Under RECO's contingency plan, RECO currently intends to purchase that percentage of BGS Load, not met through the Auction Process, in PJM administered markets.<sup>3</sup> This purchase is a strong feature of the Auction proposal because it provides bidders a strong incentive to participate in the Auction Process.

During the 2006 BGS Auction, RECO did not receive any bids on its BGS-CIEP tranche. As a result, RECO was forced to purchase its BGS-CIEP supply from the PJM markets. In the event that RECO is not able to auction its BGS-CIEP tranche successfully in the 2019 BGS Auction, RECO proposes to employ the following procedures:

• RECO will not submit any day-ahead energy bids, rather the BGS-CIEP load will be filled from the PJM real time market.

<sup>&</sup>lt;sup>2</sup> Excluding the two 36-month tranches that were auctioned off successfully in the previous two BGS-RSCP Auctions.

<sup>&</sup>lt;sup>3</sup> While RECO's current intention is to purchase from PJM administered markets, RECO reserves the right to consider other alternatives. Although unlikely, in the event that purchases from New York Independent System Operator ("NYISO") administered markets provide a more cost effective alternative to PJM, RECO reserves the right to make purchases from NYISO administered markets.

- RECO will prepare a BGS-CIEP load backcast for the previous day and submit this backcast to PJM.
- RECO will purchase capacity credits from eRPM in PJM or from bilateral purchases on a monthly and daily basis.
- RECO will purchase ancillary services on a daily basis from the real time PJM market.
- RECO will set its CIEP Standby Fee at the level determined by the Board.
- RECO will fulfill any Class I, Class II, and Solar requirements, for its unsubscribed BGS tranches, by securing the needed PJM Generation Attributes Tracking ("GATS") system generated renewable energy certificates ("RECs") through any available PJM market, or bilaterally. In the event RECs are not available on the market, RECO will make the necessary Alternative Compliance Payments.
- All costs and revenue (with the exception of retail margin revenue) will flow through the reconciliation account for BGS-CIEP. Costs will include the procurement of all necessary services, including energy, capacity, ancillary services, Class I, II and Solar RECs, transmission (including SECA, transmission enhancement and RMR), and any other expenses related to the implementation of RECO's contingency plan.
  - (b) Defaults prior to June 1, 2020

If a winning bidder defaults prior to the commencement of the BGS service, then the open tranches may be offered to the other winning bidder(s) or these tranches will be bid out as quickly as possible. Additional costs will be assessed against the defaulting company's BGS credit security.

## (c) Defaults during the Supply Period

If a default occurs during the supply period, then Tranches supplied by the defaulting party may be offered to other suppliers, bid out, or procured in PJM administered markets. If a default involves RECO's 36-month BGS-RSCP tranches, RECO only will seek replacement supply until May 31, 2021. For the remainder of the 36-month period, RECO will seek replacement supply through whatever process is implemented by the Board for the period commencing June 1, 2021.

Additional costs will be assessed against the defaulting company's BGS credit security.

### **E.** Accounting and Cost Recovery

The accounting and cost recovery that RECO proposes with respect to BGS is summarized in this section.

(a) System Control Charge ("SCC")

If applicable to RECO, the SCC will be calculated initially, and then annually on a cents per kWh basis and the charge will be applied to all of the Company's electric distribution customers. This charge would be published in a separate SCC tariff leaf. This tariff leaf would be filed with the Board upon the Board's issuance of the appropriate order(s). If applicable to RECO, the SCC would be applied to all distribution customers' bills to provide recovery for appliance cycling load management costs. The charge would be set initially to recover estimated annual expenditures as approved by the Board. The SCC would be subject to deferred accounting with interest at the rate applicable to SBC deferrals.

## (b) BGS-RSCP and BGS-CIEP Reconciliation Charges

In its Decision and Order in Docket No. ER12070643, the Board approved the Company's proposal to change the BGS-RSCP and BGS-CIEP reconciliation charges from a monthly to a quarterly mechanism. RECO will track and defer separately for the BGS-RSCP and BGS-CIEP classes of customers, on a monthly basis, any differences between BGS revenue and BGS costs.

BGS costs are comprised of the following:

- 1. Payments made to BGS-RSCP and BGS-CIEP suppliers;
- 2. RECO's pro-rata share of any procurement of capacity, energy, and ancillary services, pursuant to its FERC-approved Power Supply Agreement, and other costs incurred, including hedging and costs associated with the RECO Request for Proposal ("RFP");
- 3. The cost of any procurement of capacity, energy, ancillary services, transmission, RPS compliance, and other costs incurred under the Contingency Plan less any payments recovered from defaulting suppliers;
- 4. Costs incurred by RECO to participate in the BGS Auction as well as any costs incurred to conduct the RECO RFP, including outside attorney and consultant expenses and other costs incurred by or allocated to RECO related to the conduct of the Auction; and
- 5. Any administrative costs associated with the provision of BGS-RSCP and BGS-CIEP service;
  Administrative costs are defined as commonly-incurred or directly-incurred. Commonly-incurred costs are costs shared among all of the EDCs. Directly-incurred costs are costs specifically incurred by each EDC, individually.
  - a. Commonly-incurred costs include, but are not limited to, the following:
    - preparing and conducting the annual auction, which include all pre-auction development work, developing and printing materials, developing and maintaining the BGS auction website, conducting information sessions for prospective bidders, as well as other consulting services provided by the Auction Manager;
    - oversight of the auction process on behalf of the NJBPU, as performed by the Board's consultant.

- rent and maintenance of office space in New Jersey for the Auction Manager;
- outside counsel legal costs associated with the prosecution and/or defense of BGS patent claims; and
- facility costs associated with viewing the annual auction in real time, which include, but are not limited to, costs for physical space and equipment/media connections.

RECO has no directly-incurred costs.

The Commonly-incurred cost estimates for each BGS Auction cycle are paid for by the winning bidders of the auction at the start of each Energy Year through the Tranche Fee. The difference between the estimated commonly-incurred costs and the actual commonly-incurred costs, and all the directly-incurred costs are paid through the BGS Reconciliation Charges.

Reconciliation charges are necessary to reconcile the differences between monthly BGS supply costs and BGS revenues from customers for BGS service. Separate BGS-RSCP and BGS-CIEP Reconciliation Charges, applicable to all BGS-RSCP and BGS-CIEP customers, respectively, will be calculated and assessed quarterly on a cents per kWh basis to reconcile previous over- or under-collections. The BGS-RSCP and BGS-CIEP Reconciliation Charges will be published in separate BGS RSCP and BGS-CIEP Reconciliation Charges will be published in separate BGS Reconciliation Charge tariff leaves on a quarterly basis. These tariff leaves will be filed with the Board fifteen days prior to the first day of the effective quarter.

The BGS-RSCP and BGS-CIEP Reconciliation Charges will be subject to deferred accounting with interest and will be determined individually as set forth below:

The BGS-RSCP and BGS-CIEP Reconciliation Charges will be used to true up the differences between BGS costs and BGS revenues from customers. Differences in costs and cost recovery will be computed for each month in the quarter

and assessed through the BGS-RSCP and BGS-CIEP Reconciliation Charges applied to customers' bills in the following quarter. Two of these differences are as follows:

- 1. The difference between BGS Costs and BGS revenues for each month in the quarter.
- 2. The difference between the total reconciliation charge revenue intended to be recovered in each quarter and the actual reconciliation charge revenues recovered in the quarter. This difference will be driven by differences between actual kWh in the quarter in which the reconciliation charge was assessed and the kWh used to calculate the charge.

The reconciliation charges to be applied in the following quarter are calculated individually for BGS-RSCP and BGS-CIEP service as the net of the two differences described above on a monthly basis for the current quarter (plus or minus any cumulative under or over recovery from the prior quarter) divided by the forecasted BGS kWh for the following quarter.

For any given quarter, the reconciliation charges shall not exceed a charge or credit of 2.0 cents per kWh, including sales and use tax. In the event the 2.0 cents per kWh limit is imposed, any remaining over- or under-collection balance shall be included in the subsequent quarter's reconciliation charges to the extent possible within the 2.0 cents per kWh limitation.

Reconciliation for the Months of:	Quarter Rate is In Effect:
February - April	June 1 - August 31
May - July	September 1 - November 30

The following table summarizes RECO's current process.

August - October	December 1 - February 28
November - January	March 1 - May 31

Interest will be applied based on two-year constant maturity treasuries as published in the Federal Reserve Statistical Release on the first day of each month or the closest day thereafter on which rates are published, plus 60-basis points. However, the interest rate shall not exceed the Company's overall rate of return as authorized by the Board. The interest rate will be determined for each month in the quarter based on the criteria above.

## F. Description of BGS Tariff Changes

Draft tariff leaves indicating "X.XXX" for the rates that will change as a result of the BGS-RSCP and BGS-CIEP Auctions are included in Attachment A. The Company is proposing to combine the BGS-RSCP rate structures of Service Classification ("SC") No. 1, Residential Service and SC No. 5, Residential Space Heating Service. This change is necessary due to the Company's proposal in its ongoing base rate proceeding in BPU Docket No. ER19050552 to set equal the distribution rates of SC Nos. 1 and 5. Should the Board reject the Company's proposal in the base rate proceeding, the Company will separate the BGS-RSCP rate structures of SC Nos. 1 and 5 in the future updates to the Company's BGS Proposal.

For the BGS rates applicable to BGS-RSCP eligible SC No. 2 demand billed customers, the Company is maintaining the 33% demand differential for the first 5 kW and above 5 kW demand that was previously approved in its filing in Docket No. ER14040370. Final tariff leaves including the actual BGS rates and tariff provisions to become effective on June 1, 2020 will be filed with the Board upon its issuance of an appropriate Board order approving the BGS Auction Process.

## G. RECO RFP

Rockland's Central and Western divisions are physically connected to the New York Control Area administered by the New York Independent System Operator ("NYISO"). Therefore, RECO must purchase the energy and capacity needs of its Central and Western BGS customers from markets administered by the NYISO. As explained below, RECO does not need to conduct an RFP for the 2020 BGS auction.

With regard to the purchase of energy, in the Board's November 21, 2017 Order in Docket No. ER17040335, the Board approved a Request for Proposal ("RFP") process for Rockland to solicit competitive bids from qualified bidders for fixed energy supply prices for BGS customers in Rockland's Central and Western Divisions, commencing June 1, 2018. On January 30, 2018, Rockland conducted its RFP for the period June 1, 2018 through May 31, 2021. As a result of the RFP, RECO entered into a three year Fixed for Floating Energy Swap contract with Shell Trading Risk Management, LLC. The Board approved this RFP result in its February 8, 2018 Order in ER17040335. The RFP price will be rolled into Rockland's BGS auction price to develop a weighted average BGS-RSCP price for the period June 1, 2020 through May 31, 2021. Therefore, RECO does not need to conduct an RFP for the 2020 BGS auction.

With regard to the procurement of capacity, on August 16, 2013, the Federal Energy Regulatory Commission ("FERC") approved the creation of a new capacity market zone in the Lower Hudson Valley region encompassing NYISO Load

Zones G, H, I, and J in FERC docket number ER13-1380. Lower Hudson Valley capacity is not actively traded, and the Company does not expect the above to change before the BGS Auction.<sup>4</sup> As a result of the capacity market changes at the NYISO noted above, Rockland will purchase the capacity needs of its BGS customers in its Central and Western Divisions in the NYISO capacity market and blend its forecast of those prices into the BGS-RSCP price. This is the same proposal approved by the Board in its November 19, 2018 Order in Docket number ER18040356. The impact of these capacity purchases are expected to be minimal because the Company's Central and Western Divisions constitute only about ten percent of the Company's BGS load.

#### H. BGS Rate Design Methodology

### RECO BGS Pricing Spreadsheet

As described in the EDC Compliance Filing, the resulting charge for each BGS rate element (e.g., SC No. 1 summer charge, winter charge) for BGS supply service will be based on a factor applied to the tranche weighted average of the winning BGS-RSCP bid prices adjusted for the seasonal payment factors. These factors have been developed based on the ratios of the estimated underlying market costs of each rate element (for each service classification) to the overall all-in BGS cost. The tables included in Attachment B present all of the input data, intermediate calculations, and the final results in the calculation of these factors.

Table #1 (% Usage during PJM On-Peak Period) contains the percentage of on-peak load, by month, for each service classification. The on-peak period as used

<sup>&</sup>lt;sup>4</sup> Such cleared products are necessary benchmarks that enable bidders to develop their bids for financial hedging contracts.

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 year 2018 based on load profile information.

Table #2 (% Usage During RECO On-Peak Billing Period) contains percentages of on-peak load, by month, for RECO BGS-RSCP service classifications that are billed on a time of use basis (SC No. 3). These percentages are based on RECO's time periods used for customer billing.

Table #3 (Class Usage @ customer) contains monthly sales forecasted for the calendar year 2020 with a migration adjustment for retail access. The values in Table #3 will be updated in January 2020 to better reflect the amount by Service Classification that could be in effect starting on June 1, 2020.

Table #4 (Forward Prices – Energy Only @ bulk system) contains the forward prices for energy, by time period and month for the BGS analysis period. These values are a weighted average forecast of PJM and NYISO energy prices as calculated in Table #18. The PJM values are the published energy on-peak forwards for the PJM West trading hub for the period of June 2020 to May 2021, and an estimate based on off/on peak LMP ratios for the off-peak periods of each month. The NYISO values are based on a combination of forward and historical prices. An adjustment to the PJM forward prices used to calculate the prices contained in Table #4 must be made to correct for the effects of the basis differential in the PJM system between the PJM

West trading hub and the RECO zone where the BGS supply will be utilized. Table #18 contains an estimate of this basis differential, 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 RECO's PJM zone.

Table #5 (Losses) contains the factors utilized for average system losses, including PJM losses and unaccounted for supply (net of marginal losses) that are input by service classification and voltage level. Loss factors are those in RECO's current, Board approved, Third Party Supplier Agreement. PJM losses are the average percentage PJM EHV losses plus Inadvertent Energy for the period of June 2016 to May 2019, which equals 0.4952%. Marginal losses are excluded from the loss factors based on historic de-rating factors for the period January 2016 to December 2018.

Table #6 (Summary of Average BGS Energy Only Unit Costs @ customer – PJM Time Periods) is the calculation of the energy only costs by service classification, 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 forward prices (from Table #4) adjusted for losses (from Table #5), 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 Capacity or Transmission costs, which will be considered in subsequent calculations.

Table #7 (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 #6, the monthly time period weights from Table #1 and the total sales to customers from Table #3.

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

Table #8 (Summary of Average BGS Energy Only Units Costs @ customer – RECO Time Periods) shows the result of this adjustment for Service Classification No. 3 rates billed on a time of use basis. These values are calculated by starting with the values in Table #6. Because RECO bills fewer peak hours than the peak hours defined by PJM, the prices in Table #6 would result in a revenue shortfall when applied to RECO's SC No. 3 peak and off-peak kWh consumption. To correct for this difference, the shortfall is divided by the total kWh for Service Classification No. 3 and the resulting per unit shortfall is added to both the on-peak and off-peak charges in Table #6 to arrive at the prices in Table #8. The next steps set up the values necessary for the inclusion of the costs of the Generation Capacity and Transmission.

The top portion of Table #9 (Generation & Transmission Obligations and Costs and Other Adjustments) shows the total obligations with a migration adjustment, by rate schedule, that are currently being utilized in the year 2019. The values in the top portion of Table #9 will be updated in January 2020 to better reflect the aggregate amount by rate schedule that could be in effect on June 1, 2020. 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. However, the Capacity Proxy Price of 152.06 is used for Delivery Year

2022/2023<sup>5</sup> in place of the 2022/2023 Base Residual Auction ("BRA") value in the development of the average price of generation capacity. The Capacity Proxy Price will be replaced with the results of the Third Incremental RPM Auction for the 2022/2023 Delivery Year when available. The cost of transmission service is equal to the rate in the PJM Open Access Transmission Tariff for network transmission service in the RECO zone. The generation capacity costs are based on an estimate of the relevant current wholesale market prices in the PJM (i.e., three-year average for the period 2020 to 2023 for RECO using proxy price for 2023), and NYISO zones as calculated in Table #19. Also shown is the level of blocking in the BGS charges for SC Nos. 1/5, which will be utilized in the later calculations of the blocking of BGS charges for this combined service classification group.

An estimate of the cost of ancillary services and Renewable Portfolio Standard is included in Table #10 (Ancillary Services and Renewable Portfolio Standard). The Ancillary Services estimate is a weighted average of estimated Ancillary Services costs in RECO's PJM zone (i.e., \$2 per MWH) and RECO's estimate of Ancillary Services costs in RECO's NYISO zone as calculated in Table #20. Additionally, Renewable Portfolio Standard costs estimated to be \$16.72 per MWh are included in the calculation of the BGS-RSCP rates to reflect compliance costs.

Table #11 (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 MWh basis to those service classifications under which BGS service will be billed only on a per kWh basis.

<sup>&</sup>lt;sup>5</sup> The 2022/2023 Delivery Year is June 1, 2022 through May 31, 2023.

Table #12 (Summary of BGS Unit Costs @ customer) is the result of the inclusion of the transmission, generation capacity, and Ancillary Services costs to the costs shown in Table #8. 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 and the bulk system meters.

Table #13 (Ratio of BGS Unit Costs @ customer to All-In Average Cost @ transmission nodes) indicates the ratio of the individual rate element costs from Table #12 to the overall all-in cost as measured at the bulk system plus constant, where applicable.

Table #14 (Summary of BGS Unit Costs Less Transmission @customer) provides the BGS unit costs as developed in Table 12, with the exception of transmission. The bottom portion of the table shows the total estimated costs for BGS less transmission costs and the average unit cost as measured at the customer meters and the bulk system.

Table #15 (Ratio of BGS Unit Costs Less Transmission @ customer to All-In Average Cost @ transmission nodes) indicates the ratio of the individual rate element costs from Table #14 to the overall all-in cost as measured at the bulk system. These ratios are used to establish the BGS prices to retail customers.

Table #16 (Summary of Total BGS Costs by Season) shows the summary of the total and percentage of costs by rate and by season. A calculation in the lower portion of this table shows the resulting average costs per MWh for the winter and summer costs and MWhs, while the ratio of these seasonal unit costs to the all-in cost (from Table #12) is shown in the lower right hand portion of this table.

Table #17 (Summary of Total BGS Costs by Season Less Transmission) shows the summary of the total and percentage of costs by rate and by season. This is similar to the values indicated in Table #16, however this table excludes the cost for transmission. A calculation in the lower portion of this table shows the resulting average costs per MWh for the winter and summer costs and MWhs, while the ratio of these seasonal unit costs to the all-in cost (from Table #14) is shown in the lower right hand portion of this table.

Tables #18 (Forward Energy Prices), #19 (Generation Capacity Prices), and #20 (Ancillary Services and Renewable Portfolio Standard Prices) show the calculation of weighted average prices for energy, generation capacity and Ancillary Services as more fully described under "Table #4", "Table #9" and "Table #10". An estimate of the effects of the cost of the Renewable Portfolio Standard is included in the development of the final BGS rates. The values of \$2.00 per MWh and \$16.72 per MWh are used, respectively for ancillary services and Renewable Portfolio Standard Prices. 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.

The second spreadsheet used in the calculation of the final BGS-RSCP rates is included as Attachment C. 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 (Weighted Average Price Calculation) contains the results of theBGS (i.e., current and prior two) auctions. However, the Capacity Proxy Price of

\$152.06 is used for Delivery Year 2022/2023 in place of the 2022/2023 BRA value in the development of the average price of generation capacity. The Capacity Proxy Price will be replaced with the results of the Third Incremental RPM Auction for the 2022/2023 Delivery Year when available. The table also includes the impacts of RECO's RFP for the Central and Western Divisions.<sup>6</sup> However, upon the conclusion of the RECO RFP cost will be applied to the results of the prior two BGS auctions. From these values, the weighted average total price (shown on line #25) is calculated. All of the formulas used in this table are shown in the right hand column of this table, under the head of "Notes." To the extent the seasonal factors for the 12-month BGS period beginning June 1, 2020 (as calculated in Table #16) produce a summer payment factor less than one and a winter payment factor greater than one, the Company reserves its right to set the seasonal factors to 1.0 for both the Summer and Winter periods in any updates to the Company's BGS Pricing Spreadsheet. Accordingly, the Company has set the seasonal factors to 1.0 for both the Summer and Winter periods.

Table B (Ratio of BGS Unit Costs Less Transmission @ Customer to All-In Average Cost @ transmission nodes) is a repeat of the values shown in Table #15 from Attachment B, the bid factors calculated based on current market conditions.

Table C (Determination of Preliminary Retail Rates to be Charged to BGS Customers) contains the preliminary customer BGS-RSCP rates as the product of the weighted average total price (from Table A), excluding the weighted average transmission rate included therein, and the Bid Factors from Table B.

<sup>&</sup>lt;sup>6</sup> The prices shown for the tranches to be secured in the 2020 auction and RFP are for illustrative purposes only, and will be replaced with actual data in determining RECO's final June 2020 BGS-RSCP rates.

Table D (Calculation of Rate Adjustment Factors) 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 Rate Adjustment Factors is also performed in this table. These factors 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 Retail 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 Rate Adjustment Factors that were developed in Table D. The resulting rates are then adjusted to include the New Jersey Sales and Use Tax at the rate of 6.625%.

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.

## I. Capacity Charges

Capacity charges are the separate charges designed to recover the costs associated with generation capacity for BGS-RSCP customers. These charges are expressed on a per-kW of generation capacity obligation basis.

Typically, 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, 2020/2021, 2021/2022, and 2022/2023 BRA for RPM results applicable to load served in the RECO zone. With the postponement of the BRA

for the 2022/2023 Delivery Year, a Capacity Proxy Price of \$152.06\_per MW-Day has been used in place of the 2022/2023 BRA value.

For Energy Year ("EY") 2023, payments to BGS suppliers that execute the Supplement to the BGS-RSCP Supplier Master Agreement approved by the NJBPU on November 13, 2019 will be adjusted for the capacity price difference between the PJM Zonal Net Load Price (inclusive of the results of the Third Incremental RPM Auction for Delivery Year 2022/2023), and the Capacity Proxy Price for the 2022/2023 Delivery Year. RECO will file new tariff sheets for EY 2023, reflecting the impact of this price adjustment. The rate design spreadsheets include the formulas that will be used to reflect the impact of payments made pursuant to the Supplements. However, the spreadsheets do not provide a value for this true up as the actual value is not known at this time. Attachment D provides an illustrative example of the calculation.

## J. Transmission Charges

The transmission charges applicable to RECO's BGS-RSCP and BGS-CIEP customers are based on the currently effective transmission rates applicable to the RECO zone, as stated in PJM's Open Access Transmission Tariff ("PJM Transmission Rates"). The PJM Transmission Rates will change from time to time as FERC approves changes in the PJM Open Access Transmission Tariff. Such changes in the PJM Transmission Rates, including but not limited to changes associated with the Seams Elimination Charge/Cost Adjustments/Assignments ("SECA"), Transmission Enhancement Charges ("TECs") and Reliability Must Run ("RMR") charges, will result in changes to RECO's transmission rates applicable to its BGS-RSCP and BGS-CIEP customers. RECO will review and verify the basis for any transmission cost

adjustment, and file supporting documentation from the PJM Transmission Rates as well as any rate translation spreadsheets used.

## K. Conclusion

In connection with this filing, the Company requests that the Board issue an order making the following findings and determinations:

- The Company's proposed treatment of its Committed Supply is approved by the Board;
- The Company's proposed accounting for BGS is approved by the Board for purposes of accounting and BGS cost recovery;
- 3. 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;
- RECO's Contingency Plan is approved by the Board, and the costs incurred as a result of this Contingency Plan are presumptively prudent, subject to deferral, and approved for full and timely recovery;
- 5. The RECO-specific statewide Auction results are approved by the Board and produce BGS supply costs that are reasonable and prudent, subject to deferral, and approved for full and timely recovery;
- The Company's proposal for its Central and Western Divisions is approved by the Board; and
- The Company's Rate Design Methodology and Tariff Sheets are approved by the Board.

Attachment A

## DRAFT

Revised Leaf No. 50 Superseding Leaf No. 50

## **GENERAL INFORMATION**

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

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

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

Service Classification	Summer Months*	Other Months
1 – First 600 kWh	X.XXX¢	X.XXX¢
1 – Over 600 kWh	X.XXX¢	X.XXX¢
2 - (Non-Demand Billed) – All kWh	X.XXX¢	X.XXX¢
3 – Peak	XX.XXX ¢	X.XXX¢
3 – Off-Peak	X.XXX¢	X.XXX¢
4 – All kWh	X.XXX¢	X.XXX¢
5 – First 600 kWh	X.XXX¢	X.XXX¢
5 – Over 600 kWh	X.XXX¢	X.XXX¢
6 – All kWh	X.XXX¢	X.XXX¢

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

	Summer Months*	Other Months
Demand Charges		
First 5 kW (\$/kW)	X.XX	X.XX
Over 5 kW (\$/kW)	X.XX	X.XX
Usage Charges		
All kWh (¢/kWh)	X.XXX¢	X.XXX¢

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

\*Definition of Summer Billing Months - June through September

#### DRAFT

Revised Leaf No. 52 Superseding Leaf No. 52

### **GENERAL INFORMATION**

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

(2) <u>Basic Generation Service – Commercial and Industrial Energy Pricing</u> (BGS-CIEP)

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

#### BGS Energy Charges:

Charges per kilowatthour:

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

#### BGS Capacity Charges:

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

Charge applicable in Summer* months	\$ X.XXX	
Charge applicable in other months	. \$ X.XXX	

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

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

\* June through September

(Continued)

Attachment B

## Development of BGS Cost and Bid Factors for Rates Effective June 1, 2020

			Based on 2018 Load Profile Information							
Table #1	% Usage During PJM On-Peak I	Period	On-Peak periods defined as the 16 hr PJM Trading period, adj for NERC holidays							
				Profile Meter			Profile Meter			
		Profile Meter Data	Profile Meter Data	Data	Other Analysis	s	Data			
		<u>SC1/SC5</u>	<u>SC3</u>	SC2 ND	SC4	<u>SC6</u>	SC2 Dem			
	January	51.45%	43.90%	45.36%	30.41%	30.41%	53.06%			
	February	48.85%	46.70%	49.23%	30.61%	30.61%	53.24%			
	March	47.20%	45.98%	48.16%	27.94%	27.94%	50.74%			
	April	51.26%	50.82%	54.69%	29.48%	29.48%	54.72%			
	May	53.78%	49.33%	59.55%	23.12%	23.12%	55.82%			
	June	50.30%	48.08%	52.78%	19.64%	19.64%	52.13%			
	July	55.92%	53.70%	52.11%	20.63%	20.63%	55.26%			
	August	56.85%	53.98%	51.95%	21.37%	21.37%	55.09%			
	September	51.13%	49.67%	50.55%	26.82%	26.82%	51.60%			
	October	53.26%	53.07%	58.49%	30.52%	30.52%	57.86%			
	November	47.36%	43.87%	45.76%	28.40%	28.40%	51.36%			
	December	48.45%	44.13%	43.66%	29.03%	29.03%	51.20%			

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

On-Peak periods as defined in specified rate schedule

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

#### Table #3 Class Usage @ customer

Calendar month billed sales forecasted for 2020

in MWh	<u>SC1/SC5</u>	<u>SC3</u>	SC2 ND	<u>SC4</u>	<u>SC6</u>	SC2 Dem	Total
January	56,888	35	2,257	474	496	28,484	88,633
February	49,261	42	2,610	434	410	29,343	82,098
March	45,593	23	2,260	408	406	27,368	76,057
April	40,187	22	1,745	355	424	26,400	69,132
May	42,283	16	1,579	330	399	25,690	70,296
June	56,587	20	1,462	302	372	26,671	85,413
July	79,519	25	1,947	319	351	32,579	114,739
August	81,339	22	1,863	338	345	31,384	115,290
September	67,719	19	1,731	389	407	30,909	101,173
October	47,192	17	1,419	432	481	26,598	76,139
November	43,912	21	1,635	470	524	27,122	73,684
December	<u>51,342</u>	<u>27</u>	2,056	<u>508</u>	<u>540</u>	27,835	82,307
Total	661,821	288	22,564	4,755	5,152	340,381	1,034,960

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

	in \$/MWh (See Table 18)						
		<u>On-Peak</u>	Off-Peak				
	January	47.99	38.51				
	February	45.46	36.43				
	March	33.41	26.24				
	April	28.84	22.47				
	Мау	28.30	22.01				
	June	28.32	18.05				
	July	33.45	21.32				
	August	31.03	19.80				
	September	30.20	19.23				
	October	28.56	22.17				
	November	29.33	23.06				
	December	33.95	26.97				
Table #5	Losses	<u>SC1/SC5</u>	<u>SC3</u>	SC2 ND	<u>SC4</u>	<u>SC6</u>	SC2 Dem
	Expansion Factor =	1.08524	1.08524	1.08524	1.08147	1.08147	1.08524
	Expansion Factor (net Marginal Losses)	1.07496	1.07496	1.07496	1.07122	1.07122	1.07496

## Table #6 Summary of Average BGS Energy Only Unit Costs @ customer - PJM Time Periods based on Commanda prices corrected for basis differential & losses

based on Forwards prices corrected for basis differential & losses in \$/MWh

		<u>SC1/SC5</u>	<u>SC3</u>	<u>SC2 ND</u>	<u>SC4</u>	<u>SC6</u>	SC2 Dem
Summer - all hrs		\$ 28.01	\$ 27.68	\$ 27.70	\$ 23.90	\$ 23.84	\$ 27.88
	PJM on pk	\$ 33.69	\$ 33.64	\$ 33.57	\$ 33.24	\$ 33.19	\$ 33.55
	PJM off pk	\$ 21.37	\$ 21.33	\$ 21.40	\$ 21.20	\$ 21.16	\$ 21.32
Winter - all hrs		\$ 34.13	\$ 35.45	\$ 34.68	\$ 32.14	\$ 31.75	\$ 34.02
	PJM on pk	\$ 38.06	\$ 39.60	\$ 38.31	\$ 38.03	\$ 37.60	\$ 37.61
	PJM off pk	\$ 30.18	\$ 31.82	\$ 31.06	\$ 29.74	\$ 29.38	\$ 29.90
Annual		\$ 31.50	\$ 33.13	\$ 32.51	\$ 29.80	\$ 29.48	\$ 31.83
System Total		\$ 31.61					

#### Table #7 Summary of Average BGS Energy Only Costs @ customer - PJM Time Periods

based on Forwards prices corrected for basis differential & losses in \$1000

		<u>SC1/SC5</u>	<u>SC3</u>	SC2 ND	<u>SC4</u>	<u>SC6</u>	SC2 Dem
Summer - all hrs		\$ 7,988	\$ 2	\$ 194	\$ 32	\$ 35	\$ 3,388
	PJM on pk	\$ 5,181	\$ 1	\$ 122	\$ 10	\$ 11	\$ 2,186
	PJM off pk	\$ 2,807	\$ 1	\$ 72	\$ 22	\$ 24	\$ 1,202
Winter - all hrs		\$ 12,857	\$ 7	\$ 540	\$ 110	\$ 117	\$ 7,445
	PJM on pk	\$ 7,193	\$ 4	\$ 298	\$ 37	\$ 40	\$ 4,399
	PJM off pk	\$ 5,664	\$ 3	\$ 242	\$ 72	\$ 77	\$ 3,045
Annual		\$ 20,844	\$ 10	\$ 734	\$ 142	\$ 152	\$ 10,833
System Total		\$ 32,714					

#### Table #8 Summary of Average BGS Energy Only Unit Costs @ customer - RECO Time Periods

based on Forwards prices corrected for basis differential & losses - RECO billing time periods in \$/MWh

				<u>SC1/SC5</u>		<u>SC3</u>	,	SC2 ND		<u>SC4</u>		<u>SC6</u>	<u>SC2</u>	<u>Dem</u>		
	Summer - all hrs	RECO On pk RECO Off pk	\$	28.01	\$ \$ \$	27.68 35.28 22.97	\$	27.70	\$	23.90	\$	23.84	\$2	7.88		
	Winter - all hrs	RECO On pk RECO Off pk	\$	34.13	\$ \$ \$	35.45 40.43 32.65	\$	34.68	\$	32.14	\$	31.75	\$ 34	4.02		
	Annual Average System Average		\$ \$	31.50 31.61	\$	33.13	\$	32.51	\$	29.80	\$	29.48	\$ 3	1.83		
Table #9	Generation & Tran Obligations - annua in MW	smission Obl I average fored	igations a casted for	ind Costs 2019; cost <u>SC1/SC5</u>	and Others are mar	er Adjustn ket estima <u>SC3</u>	nents tes	<u>SC2 ND</u>		<u>SC4</u>		<u>SC6</u>	SC2	<u>Dem</u>	<u>Total FP</u>	
	Gen Obl - MW			301.781		0.086		4.236		0.0		0.0	83	3.030	389.133	FALSE
	Trans Obl - MW			269.748		0.080		4.855		0.0		0.0	92	2.636	367.319	FALSE
	# of Months and Da	ys used in this	analysis		# of sumn # of win	ner days = iter days =		122 243		# of si # of	umme winte total	er months = er months = # months =		4 8 12		
	Transmission Cost*		\$	42,548	per MW-	yr		116.57								
	Generation Capacity (see Table 19)	y cost	summer winter			\$162.49 \$146.66	\$/MV \$/MV	V/day V/day	ł	Resulting ave	l gen	cap cost =	summe winte	er>> ( er>> (	\$	per kW/yr per kW/yr
	Current residential s Current Tariff and % Block 1 (0-60 Block 2 ( Calculat	summer BGS of 6 of total summ 0 kWh/month) (>600 kWh/m) ed inversion =	charges her usage	Charges 6.474 9.835 3.361	<b> SC1/S</b> ¢/kWh ¢/kWh ¢/kWh	6C5		% usage 42.10% 57.90%								
Table #10	Ancillary Services forecasted overall a	nnual average				\$18.71	/MW	h								

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

	<u>SC1/SC5</u>		SC3	<u>SC2 ND</u>	<u>S(</u>	<u>C4</u>	<u>SC6</u>
Transmission Obl - all months	\$ 17.34	\$ 11	.82	\$ 9.15	\$ -	\$	-
Generation Obl -							
per annual MWh	\$ 25.29	\$ 16	.56	\$ 10.41	\$ -	\$	-
per summer MWh	\$ 20.98	\$ 19	.82	\$ 11.99	\$ -	\$	-
per winter MWh	\$ 28.55	\$ 15	.17	\$ 9.70	\$ -	\$	-

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

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

			<u>SC1/SC5</u>		<u>SC3</u>	<u>SC2 ND</u>	<u>SC4</u>	<u>SC6</u>
Summer - all hrs	RECO On pk RECO Off pk	\$	85.04	\$ \$ \$	78.03 117.67 53.50	\$ 67.56	\$ 42.61	\$ 42.55
	Block 1 Block 2	\$ \$	65.58 99.19					
Winter - all hrs	RECO On pk RECO Off pk	\$	98.74	\$ \$ \$	81.15 113.01 63.18	\$ 72.24	\$ 50.85	\$ 50.46
Annual -all hrs		\$	92.84	\$	80.22	\$ 70.79	\$ 48.51	\$ 48.19

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

	SC2 Dem	PLUS:	
Summer - all hrs	\$ 46.59	Gen Cost (per kW of Billed Demand/Month)	
		<u>≤</u> 5 kW >	> 5 kW
Winter - all hrs	\$ 52.73	summer \$ 1.311 \$ winter \$ 1.291 \$	4.541 4.561
Annual - all hrs per MWh only	\$ 50.54	Trans cost all months \$ 3.55 per kW of T obl /month	

#### Table #12 (Continued)

Including T&G Obligation \$ Summer - all hrs	\$	73.84	Ger	n Cost (per kW of B	illed Demand/M	onth)		
Winter - all hrs	\$	80.95	 sun win	nmer ter	\$ \$	<u>≤</u> <b>5 kW</b> 1.311 1.291	\$ \$	<b>&gt; 5 kW</b> 4.541 4.561
Annual - including T&G Obl \$	\$	75.64						
ALL RATES Grand Total Cost in \$1000 All-In Avera	= \$ ge cost @	89,289 customer = \$	86.27 per MWh at custom	er (per customer m	etered MWh)			
All-In Average costs @	transmissi	ion nodes = \$	80.26 per MWH at transm	nission nodes (per m	netered MWh at	transmiss	ion no	de)

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

#### NON-DEMAND RATES

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

		<u>SC1/SC5</u>	<u>SC3</u>	SC2 ND	<u>SC4</u>	<u>SC6</u>
Summer - all hrs		1.060		0.842	0.531	0.530
	RECO On pk		1.466			
	RECO Off pk		0.667			
	Constant Blk 1 \$	(19.46)				
	Constant Blk 2 \$	<b>`14.15</b> ´				
Winter - all hrs		1.230		0.900	0.634	0.629
	RECO On pk		1.408			
	RECO Off pk		0.787			
Annual - all hrs		1.157	1.000	0.882	0.604	0.600

#### Table #13 (Continued)

#### DEMAND RATES

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

Summer - all hrs	SC2 Dem <u>Multiplier</u> 0.920 \$	SC2 Dem <u>Constant</u> (27.249)	PLUS: Gen Cost (per kW of Billed Demand/Month)	
			<u>&lt;</u> 5 kW > 5	kW
Winter - all hrs	1.009 \$	(28.221)	summer\$1.31\$4winter\$1.29\$4	.54 .56
Annual - including T&G Obl \$	0.943		Trans cost all months \$ 3.546 per kW of T obl /month	

#### Table #14 Summary of BGS Unit Costs Less Transmission @ customer

#### NON-DEMAND RATES

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

			<u>SC1/SC5</u>		<u>SC3</u>	SC2 ND	<u>SC4</u>	<u>SC6</u>
Summer - all hrs	RECO On pk RECO Off pk	\$	67.70	\$ \$ \$	66.21 105.85 41.68	\$ 58.41	\$ 42.61	\$ 42.55
	Block 1 Block 2	\$ \$	48.24 81.85					
Winter - all hrs	RECO On pk RECO Off pk	\$	81.40	\$ \$ \$	69.34 101.19 51.36	\$ 63.09	\$ 50.85	\$ 50.46
Annual -all hrs		\$	75.50	\$	68.40	\$ 61.64	\$ 48.51	\$ 48.19

#### Table #14 (Continued)

#### DEMAND RATES

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

	<u>s</u>	C2 Dem		PLUS:			
Summer - all hrs	\$	46.59		Gen Cost (per kW of Bille	d Demand/Mo	onth)	
						<u>&lt; 5 kW</u>	<u>&gt; 5 kW</u>
Winter - all hrs	\$	52.73		summer winter	\$ \$	1.311 1.291	\$ 4.541 \$ 4.561
Annual - all hrs per MWh only	\$	50.54					
Including Generation Obligation \$ Summer - all hrs	\$	63.03					
Winter - all hrs	\$	68.94					
Annual - including T&G Obl \$	\$	66.83					
ALL RATES Grand Total Cost in \$1000 = All-In Average All-In Average costs @ t	\$ e cost @ cu ansmission	74,602 stomer = \$ nodes = \$	72.08 per MWh at custome 67.06 per MWh at tranmiss	er (per customer metered MWh) sion node system (per metered MWh :	at transmissio	n node)	

#### Table #15 Ratio of BGS Unit Costs Less Transmission @ customer to All-In Average Cost @ transmission nodes

#### NON-DEMAND RATES

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

		<u>SC1/SC5</u>	<u>SC3</u>	SC2 ND	<u>SC4</u>	<u>SC6</u>
Summer - all hrs	RECO On pk RECO Off pk	1.010	1.578 0.622	0.871	0.635	0.634
	Constant Blk 1 \$ Constant Blk 2 \$	(19.46) 14.15				
Winter - all hrs	RECO On pk RECO Off pk	1.214	1.509 0.766	0.941	0.758	0.752
Annual - all hrs		1.126	1.020	0.919	0.723	0.719

#### DEMAND RATES

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

Summer - all hrs	SC2 Dem <u>Multiplier</u> 0.940	SC2 Dem <u>Constant</u> (16.440)	PLUS: Gen Cost (per kW of Billed Demand/Month)							
					<u>&lt; 5 kW</u>	<u>&gt; 5 kW</u>				
Winter - all hrs	1.028	(16.214)	summer winter	\$ \$	1.311 \$ 1.291 \$	4.541 4.561				
Annual - including T&G Obl \$	0.997									

0.9313 1.0463

SC1/SC5	SC	3	SC2 ND	SC4		SC6	SC2 Dem	
		-						
\$ 24,251	\$7	\$	473 \$	57	\$	63 \$	8,622	
\$ 37,191	\$16	\$	1,124 \$	173	\$	186 \$	17,126	
\$ 61,442	\$ 23	\$	1,597 \$	231	\$	248 \$	25,748	
39%	29%	6	30%	25%		25%	33%	
61%	71%	6	70%	75%		75%	67%	
\$ 33,473								
\$ 55,817								
\$ 89,289								
	If total \$ wer	e spli	t on a per MWh	basis (on tra	nsmissi	ion node MV	Vhs):	Ratio to All-In Cos
37%		\$	74.74 per	MWh @ trar	smissi	on nodes		Summer
63%		\$	83.98 per	MWh @ tran	smissi	on nodes		Winter
\$ \$ \$	SC1/SC5         \$       24,251       \$         \$       37,191       \$         \$       61,442       \$         \$       61,442       \$         \$       39%       61%         \$       33,473       \$         \$       55,817       \$         \$       89,289       37%         \$3%       63%       \$	SC1/SC5         SC           \$         24,251         \$         7           \$         37,191         \$         16           \$         61,442         \$         23           39%         299         61%         719           \$         33,473         \$         55,817         \$           \$         89,289         If total \$ were 37%         63%	SC1/SC5         SC3           \$         24,251         \$         7         \$           \$         37,191         \$         16         \$           \$         61,442         \$         23         \$           39%         29%         61%         71%           \$         33,473         \$         55,817         \$           \$         89,289         If total \$ were split         37%         \$           37%         \$         \$         \$         \$	SC1/SC5         SC3         SC2 ND           \$         24,251         \$         7         \$         473         \$           \$         37,191         \$         16         \$         1,124         \$           \$         61,442         23         \$         1,597         \$           39%         29%         30%         \$         61%         71%         70%           \$         33,473         \$         55,817         \$         89,289         \$         If total \$ were split on a per MWh           37%         \$         74.74         per 63%         \$         83.98         \$	SC1/SC5         SC3         SC2 ND         SC4           \$         24,251         \$         7         \$         473         \$         57           \$         37,191         \$         16         \$         1,124         \$         173           \$         61,442         \$         23         \$         1,597         \$         231           39%         29%         30%         25%         61%         71%         70%         75%           \$         33,473         \$         55,817         \$         89,289         \$         1f total \$ were split on a per MWh basis (on train 37%         \$         74.74 per MWh @ train 63%         \$         83.98 per MWh @ train 63%         \$         83.98 per MWh @ train 63%         \$         \$         83.98 per MWh @ train 63%         \$	SC1/SC5         SC3         SC2 ND         SC4           \$ 24,251 \$ 7 \$ 473 \$ 57 \$ 37,191 \$ 16 \$ 1,124 \$ 173 \$ 61,442 \$ 23 \$ 1,597 \$ 231 \$           \$ 61,442 \$ 23 \$ 1,597 \$ 231 \$           39% 29% 30% 25% 61% 71% 70% 75%           \$ 33,473 \$ 55,817 \$ 89,289           If total \$ were split on a per MWh basis (on transmission of the second	SC1/SC5         SC3         SC2 ND         SC4         SC6           \$ 24,251 \$ 7 \$ 473 \$ 57 \$ 633 \$ 37,191 \$ 16 \$ 1,124 \$ 173 \$ 186 \$ 61,442 \$ 23 \$ 1,597 \$ 231 \$ 248 \$           39% 61,442 \$ 23 \$ 1,597 \$ 231 \$ 248 \$           39% 61% 71% 70% 75% 75%           \$ 33,473 \$ 55,817 \$ 89,289           If total \$ were split on a per MWh basis (on transmission node MW 37% \$ 74.74 per MWh @ transmission nodes 63% \$ 83.98 per MWh @ transmission nodes	SC1/SC5         SC3         SC2 ND         SC4         SC6         SC2 Dem           \$         24,251 \$         7         \$         473 \$         57 \$         63 \$         8,622           \$         37,191 \$         16 \$         1,124 \$         173 \$         186 \$         17,126           \$         61,442 \$         23 \$         1,597 \$         231 \$         248 \$         25,748           39%         29%         30%         25%         25%         33%           61%         71%         70%         75%         67%           \$         33,473         \$         55,817         \$         89,289           If total \$ were split on a per MWh basis (on transmission node MWhs):         37%         \$         74.74 per MWh @ transmission nodes           37%         \$         74.74 per MWh @ transmission nodes         \$         83.98 per MWh @ transmission nodes

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

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

	SC1/SC5	SC3	SC2 ND		SC4	SC6	SC2 Dem		
Total Costs by Rate - in \$1000									
Summer	\$ 19,306 \$	6 \$	<b>409</b>	\$	57 \$	63 \$	7,308		
Winter	\$ 30,659 \$	14 \$	S 982	\$	173 \$	186 \$	14,499		
Total	\$ 49,964 \$	20 \$	5 1,391	\$	231 \$	248 \$	21,807		
% of Annual Total \$ by Rate									
Summer	39%	29%	29%		25%	25%	34%		
Winter	61%	71%	71%		75%	75%	66%		
Total Costs - in \$1000									
Summer	\$ 27,148								
Winter	\$ 46,512								
Total	\$ 73,661								
% of Annual Total \$	lf	total \$ were sp	olit on a per M	Wh basi	s (on transmiss	ion node MW	/hs):	Ratio to All-I	n Cost
Summer	37%	\$	60.62	per MW	'h @ transmissi	on nodes		Summer	0.904
Winter	63%	\$	69.98	per MW	h @ transmissi	on nodes		Winter	1.043

#### Table #18 Forward Energy Prices

y @ bulk system			Zone to Western H Basis Differential	lub	PJM Forward Price (incl basis different	s :ial)		
	Off/On Peak		in \$/MWh		in \$/MWh			
<u>On-Peak</u>	LMP ratio	Off-Peak	On-Peak	Off-Peak	<u>On-Peak</u>	Off-Peak		
47.30	0.7876	37.25	97%	97%	45.88	36.13		
44.65	0.7876	35.17	97%	97%	43.31	34.11		
33.70	0.7876	26.54	97%	97%	32.69	25.74		
29.50	0.7876	23.23	97%	97%	28.62	22.53		
29.25	0.7876	23.04	97%	97%	28.37	22.35		
29.30	0.6684	19.58	96%	91%	28.13	17.82		
34.45	0.6684	23.03	96%	91%	33.07	20.96		
31.95	0.6684	21.36	96%	91%	30.67	19.44		
31.45	0.6684	21.02	96%	91%	30.19	19.13		
29.35	0.7876	23.12	97%	97%	28.47	22.43		
29.80	0.7876	23.47	97%	97%	28.91	22.77		
33.40	0.7876	26.31	97%	97%	32.40	25.52		
	y @ bulk system <u>On-Peak</u> 47.30 44.65 33.70 29.50 29.25 29.30 34.45 31.95 31.45 29.35 29.80 33.40	y @ bulk system         Off/On Peak           On-Peak         LMP ratio           47.30         0.7876           44.65         0.7876           33.70         0.7876           29.50         0.7876           29.50         0.7876           29.25         0.7876           29.30         0.6684           31.45         0.6684           31.45         0.6684           29.35         0.7876           29.35         0.7876	y @ bulk system       Off/On Peak         On-Peak       LMP ratio       Off-Peak         47.30       0.7876       37.25         44.65       0.7876       35.17         33.70       0.7876       26.54         29.50       0.7876       23.23         29.25       0.7876       23.04         29.30       0.6684       19.58         34.45       0.6684       21.36         31.95       0.6684       21.36         31.45       0.6684       21.22         29.35       0.7876       23.12         29.80       0.7876       23.12         29.80       0.7876       23.47         33.40       0.7876       26.31	Y @ bulk system         Zone to Western H Basis Differential in \$/MWh           On-Peak         LMP ratio         Off-Peak         In \$/MWh           47.30         0.7876         37.25         97%           44.65         0.7876         35.17         97%           33.70         0.7876         26.54         97%           29.50         0.7876         23.23         97%           29.25         0.7876         23.04         97%           29.30         0.6684         19.58         96%           34.45         0.6684         21.36         96%           31.45         0.6684         21.02         96%           31.45         0.6684         21.02         96%           29.35         0.7876         23.12         97%           29.80         0.7876         23.47         97%           33.40         0.7876         23.47         97%	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	y @ bulk system         Zone to Western Hub Basis Differential in \$/MWh         PJM Forward Price (incl basis differential in \$/MWh           On-Peak         LMP ratio         Off-Peak         On-Peak         Off-Peak         On-Peak         On <peak<< td=""></peak<<>		

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

	On-Peak	Off-Peak
January	63.75	56.25
February	61.50	53.75
March	38.75	30.00
April	30.50	22.00
May	27.75	19.50
June	29.75	19.75
July	36.25	24.00
August	33.75	22.50
September	30.25	20.00
October	29.25	20.25
November	32.50	25.25
December	45.50	37.75

## Weighted Average Forward Prices - Energy Only @ bulk system (88.2% PJM - 11.8% NYISO)

ın \$/MWh			
	On-Peak	Off-Peak	
January	47.99	38.51	88.2%
February	45.46	36.43	11.8%
March	33.41	26.24	
April	28.84	22.47	
May	28.30	22.01	
June	28.32	18.05	
July	33.45	21.32	
August	31.03	19.80	
September	30.20	19.23	
October	28.56	22.17	
November	29.33	23.06	
December	33.95	26.97	

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

	PJM Base <u>Capacity</u>	PJM <u>88.2%</u>	NYISO <u>11.8%</u>	Weighted <u>Average</u>
Summer	\$163.32	\$163.32	\$156.25	\$162.49
Winter	\$163.32	\$163.32	22.34	\$146.66

#### Table #20 Ancillary Services

		PJM Ancillary <u>Services</u>	NYISO Ancillary Services	Renewable Power Cost	PJM <u>88.2%</u>	NYISO <u>11.8%</u>	Weighted <u>Average</u>		
		\$2.00	\$1.90	\$16.72	\$18.72	\$18.62	\$18.71		
Assumptions:									
	Gen Cost =	\$162.49 \$146.66	per MW-day in sum per MW-day in wint	nmer er					
	Trans cost =	\$ 42,548	per MW-yr						
Analys	sis time period =	4 summer months 8 winter months							
Anc	illary Services =	\$ 18.71	/MWh						
	Energy Costs = I	Based on Jun 2020	to May 2021 Forwa	ards @ PJM West as	s of November 11,	2019			
		Based on May 2020	) to Apr 2021 Forwar	rds @ NYISO Zone	G and Lower Hud	son Valley (LH	V) as of June 01, 2019		
U	sage patterns =	Forecasted 2019 er	nergy use by class, F	PJM on/off % from 2	018 class load pro	ofiles,			
	RECO billing on/off % from 6/18 to 5/19 actual data								
	Obligations =	Class totals for 201	19						
	Losses =	Per RECO's Third F	Party Supplier Agree	ment adjusted for Pa	JM 500kV losses a	and inadvertent	t energy.		
PJM	Time Periods =	PJM trading time pe	eriods - 7 AM to 11 F	M weekdays, local t	time, x NERC				
	I	Holidays - New Yea	r's, Memorial, 4th of	July, Labor Day, Th	nanksgiving & Chri	stmas			
RECO Billing	g time periods =	as per specific rate	schedule						

Attachment C

2020 BGS Auction

#### Table A Weighted Average Price Calculation

			2018	2019	2020		
			Auction	Auction	Auction		
Line #	Specific BGS-FP Auction >>		36 Month	36 Month	36 Month	Total	Notes:
1	Tranches		1	1	2	4	From then-current auction
2(a)	Winning Bid Price (¢/kWh)*		8.594	8.803	8.803		(Note: 2020 Auction Price Shown for Illustrative Purposes Only)
2(b)	Capacity Proxy Price True-up - in	(¢/kWh)*			0.000		Entered After 2022 BGS Auction
2(C)	Winning Bid Price (¢/kWh)*		8.594	8.803	8.803		= 2(a) + 2(b)
3	Transmission (¢/kWh)		1.320	1.320	1.320		Average transmission cost included in bid
4	BGS (¢/kWh)		7.274	7.483	7.483		=(2) - (3)
5	Weighted Avg BGS		1.818	1.871	3.741	7.431	= (1) / Total Tranches * (4)
6	Weighted Avg Trans		0.330	0.330	0.660	1.320	= (1) / Total Tranches * (3)
7	Weighted Avg Total Price (¢/kWh	ı)				8.751	
	Second Downant Factors						
Q	Seasonal Payment Factors	Summor	1 0000	1 0000	1 0000 **		From then-current Bid Factor Spreadsheet
0		Winter	1.0000	1.0000	1.0000 **		From then-current Bid Factor Spreadsheet
9		winter	1.0000	1.0000	1.0000		rion then-current bid ractor opreadureet
	Applicable Customer Usage @ tra	ansmission node	es	(E	astern Division)		
10	S	Summer MWh	394,915				From then-current Bid Factor Spreadsheet
11		Winter MWh	<u>586,129</u>				From then-current Bid Factor Spreadsheet
12			981,044				
	<b>T</b> ( ) <b>O</b> (						
40	lotal Cost	0	0 404 754	0.004.007	47 000 404	24 550 045	(4) / T-4-1 T
13		Summer	8,484,754	8,691,097	17,382,194	34,558,045	= (1) / 10tal Franches * (2c) / 100 * (8) * (10) * 1,000 (4) / Tatal Transles * (2c) / 400* (0) * (44) * 4,000
14		Total	12,392,903	12,099,230	<u>20,790,470</u>	<u>51,290,699</u> 95,949,744	= (1) / 10(a) 11anches (2c) / 100 (9) (11) 1,000 = (12) + (14)
15		TOLA	21,077,739	21,590,555	43,180,070	03,040,744	=(13)+(14)
	Average Cost (NJ Statewide Auct	tion)					
16		Summer	8.751 ø	≿/kWh			= sum(line 13) / (10) / 1000 * 100 rounded to 3 decimal places
17		Winter	8.751 ø	≿/kWh			= sum(line 14) / (11) / 1000 * 100 rounded to 3 decimal places
18		Total	8.751 🤉	≿/kWh			= sum(line 15) / (12) / 1000 * 100 rounded to 3 decimal places
	Average Cost (Including RECO R	<u>.FP)</u>	DOO	DECO			
			BGS	RECO		Total	
10	Tranchas		Auction	0.526		<u>1 0(a)</u>	Includes RECO REP equivalent transhes
20			4 9 751	0.550 5.514		4.550	BCS Auction from (18) Note 5 514¢ for PED is illustrative
20	Price ¢/kwn		0.701	5.514			(excludes transmission).
21	Transmission		1.320	0.000			
22	BGS		7.431	5.514		<b>7</b> 00 1	= (20) - (21)
23	Weighted Avg BGS		6.553	0.652		7.204	$= (19) / \text{Iotal Iranches}^* (22)$
24	weighted Avg Trans		1.164	0.000	-	1.164	= (19) / 10tal   ranches " (21)
25	Weighted Avg Total Price					8.368	= (23) + (24)

\* Includes Impact of PJM Marginal Losses

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

#### ROCKLAND ELECTRIC COMPANY 2020 BGS Auction

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

#### NON-DEMAND RATES

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

		<u>SC1/SC5</u>	<u>SC3</u>	SC2 ND	<u>SC4</u>	<u>SC6</u>
Summer - all hrs	RECO On pk RECO Off pk	1.010	1.578 0.622	0.871	0.635	0.634
	Constant Blk 1 Constant Blk 2	\$ (19.46) \$ 14.15				
Winter - all hrs	RECO On pk RECO Off pk	1.214	1.509 0.766	0.941	0.758	0.752
Annual - all hrs		1.126	1.020	0.919	0.723	0.719

#### DEMAND RATES

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

Summer - all hrs	SC2 Dem <u>Multiplier</u> 0.940	SC2 Dem <u>Constant</u> (16.440)	PLUS: Gen Cost (per kW of Billed Demand/Month)							
				<u>(</u>	<u>0</u>	<u>&lt; 5 kW</u>	-	<u>&gt; 5 kW</u>		
Winter - all hrs	1.028	(16.214)	summer \$	-	\$	1.311	\$	4.541		
			winter \$	-	\$	1.291	\$	4.561		
Annual - including T&G Obl \$	0.997									

#### ROCKLAND ELECTRIC COMPANY 2020 BGS Auction

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

All-In Average costs @ Trans node = Less Transmission BGS Cost	\$ \$ \$	83.68 /M' <u>(11.64)</u> /M' 72.04 /M'	Wh* Wh** Wh	* Price from Table A ( transmission for the C ** RECO average trans Central/West transmis average rate 0.536/4.	t include n Division). of 13.20 minus ion to weighted er MWh). \$1.56	
0	<u>SC1/SC5</u>	<u>SC3</u>	SC2 ND	<u>SC4</u>	<u>SC6</u>	SC2 Dem
Summer All kW/b (#/kW/b)	7 276		6 274	1 571	4 567	5 129
Peak kWh (¢/kWh)	1.210	11.368	0.274	4.574	4.507	5.120
Off-Peak kWh (¢/kWh)		4.481				
Block1	5.330					
Block2	8.691					
Demand Charge (\$/kW) 1st 5kW						1.311
Demand Charge (\$/kW)> 5 kW						4.541
Winter						
All kWh (¢/kWh)	8.745		6.779	5.460	5.417	5.784
Peak kWh (¢/kWh)		10.870				
Off-Peak kWh (¢/kWh)		5.518				
Demand Charge ( $\frac{k}{k}$ ) 1st 5kW						1.291
						4.501

## 2020 BGS Auction

Attachment C

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#### Table D Calculation of Rate Adjustment Factors

		SC1/SC5	SC3	SC2 ND	<u>SC4</u>	<u>SC6</u>	SC2 Dem
Total BGS Revenue (Excl SUT	) - in \$100	00					
Summer	\$	20,749	\$ 6	\$ 439	\$ 62	\$ 67	\$ 8,231
Winter	\$	32,939	\$ <u>15</u>	\$ 1,055	\$ <u>186</u>	\$ 199	\$ 16,206
Total	\$	53,688	\$ 21	\$ 1,494	\$ 248	\$ 266	\$ 24,437
Total							
Summer	\$	29,554					
Winter	\$	50,600					
Total	\$	80,154					

#### Total Supplier Payments - in \$1000

Eastern Division		Total		Transmission		Net BGS	
Summer	\$	34,558	\$	4,594	\$	29,964	
Winter	\$	51,291	\$	9,188	\$	42,103	
Total	\$	85,849	\$	13,782	\$	72,067	
Central/Western Division		Total		Transmission		Net BGS	
Summer	\$	2,946	\$	-	\$	2,946	
Winter	\$	4,331	\$	-	\$	4,331	
Total	\$	7,277	\$	-	\$	7,277	
Total RECO FP		Total		Transmission		Net BGS	
Summer	\$	37,504	\$	4,594	\$	32,910	
Winter	\$	55,622	\$	9,188	\$	46,434	
Total	\$	93,126	\$	13,782	\$	79,344	
							Rate
Differences		BGS		BGS			Adjustment
		Revenue		<u>Costs</u>		<u>Difference</u>	Factors
-			-	~~ ~ ~ ~	φ.	0 0 5 0	4 4 4 9 5 9
Summer	\$	29,554	\$	32,910	\$	3,356	1.11356
Summer Winter	\$ \$	29,554 50,600	\$ \$	32,910 <u>46,434</u>	ֆ \$	3,356 (4,166)	1.11356 0.91766

2020 BGS Auction

#### Table E Final Retail BGS Rates (¢/kWh)

#### Rates Excluding SUT:

	<u>SC1/SC5</u>	<u>SC3</u>	SC2 ND	<u>SC4</u>	<u>SC6</u>	SC2 Dem
Summer						
All kWh (¢/kWh) Peak kWh (¢/kWh) Off-Peak kWh (¢/kWh)	8.102	12.659 4.990	6.986	5.093	5.086	5.710
Block1	5.935					
Block2	9.678					
Demand Charge (\$/kW) 1st 5kW Demand Charge (\$/kW) > 5 kW						1.460 5.057
Winter						
All kWh (¢/kWh)	8.025		6.221	5.010	4.971	5.308
Peak kWh (¢/kWh)		9.975				
		5.004				
Demand Charge (\$/kW) 1st 5kW Demand Charge (\$/kW) > 5 kW						1.185 4.185
Rates Including SUT:	SUT	@	6.625%			
	<u>SC1</u>	<u>SC3</u>	SC2 ND	<u>SC4</u>	<u>SC6</u>	SC2 Dem
Summer						
All kWh (¢/kWh)		12 409	7.449	5.430	5.423	6.088
Off-Peak kWh (¢/kWh)		5 321				
Block1	6.328	0.021				
Block2	10.319					
Demand Charge (\$/kW) 1st 5kW						1.5600
Demand Charge (\$/kW)> 5 kW						5.3900
Winter						
All kWh (¢/kWh)	8.557		6.633	5.342	5.300	5.660
Peak kWh (¢/kWh)		10.636				
OII-Peak KWII (¢/KWII)		5.599				
Demand Charge (\$/kW) 1st 5kW Demand Charge (\$/kW) > 5 kW						1.2600 4.4600

2020 BGS Auction

#### Table F Spreadsheet Error Checking

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

	<u>SC1/SC5</u>	<u>SC3</u>	SC2 ND		<u>SC4</u>	<u>SC6</u>	SC2 Dem
Summer	\$ 23,104	\$ 7	\$	489	\$ 69	\$ 75	\$ 9,165
Winter	\$ 30,227	\$ 14	\$	968	\$ 171	\$ 183	\$ 14,872
Total	\$ 53,331	\$ 21	\$	1,457	\$ 240	\$ 258	\$ 24,037
Total							
Summer	\$ 32,909						
Winter	\$ 46,435						
Total	\$ 79,344						
Supplier Payments - in \$1000							
Eastern Division							
	 Total	 Transmission		Net BGS			
Summer	\$ 34,558	\$ 4,594	\$	29,964			
Winter	\$ 51,291	\$ 9,188	\$	42,103			
Total	\$ 85,849	\$ 13,782	\$	72,067			
Central/Western Division							
	Total	Transmission		Net BGS			
Summer	\$ 2,946	\$ -	\$	2,946			
Winter	\$ 4,331	\$ -	\$	4,331			
Total	\$ 7,277	\$ -	\$	7,277			
Total RECO FP							
	Total	Transmission		Net BGS			

	 I otal	 I ransmission	 Net BG2
Summer	\$ 37,504	\$ 4,594	\$ 32,910
Winter	\$ 55,622	\$ 9,188	\$ 46,434
Total	\$ 93,126	\$ 13,782	\$ 79,344

#### Differences

	BGS	BGS	
	Revenue	<u>Costs</u>	<b>Difference</b>
Summer	\$ 32,909	\$ 32,910	\$ 1
Winter	\$ 46,435	\$ 46,434	\$ (1)
Total	\$ 79,344	\$ 79,344	\$ (0)

Attachment D

#### Attachment D

## Development of Capacity Proxy Price True-Up - \$/MWh 2020/2021 Delivery Year

	2020/21	
	Delivery Year	Notes:
1 PJM Final Zonal Net Load Price (\$/MW-day) - Zone	\$163.32	PJM RPM Final Zonal Net Load Price - Zone
2 Capacity Proxy Price (\$/MW-day)	N/A	
3 Capacity Proxy Price True-Up - \$/MW-day	N/A	= line 1 - line 2
4 BGS-RSCP Gen Obl - MW	389.1	
5 Days in Year	365	
6 Capacity Proxy Price True-Up Annual Cost	N/A	= line 3 * line 4 * line 5
7 Eligible Tranches	2	from Table A
8 Total Tranches	4	from Table A
9 % of tranches eligible for payment	50.00%	= line 7 / line 8
10 Capacity Proxy Price True-Up Cost	\$0	= line 6 * line 9
11 Total Applicable Customer Usage @ transmission nodes - in MWh	981,044	
12 Eligible Customer Usage @ transmission nodes - in MWh	490,522	= line 9 * line 11
13 Capacity Proxy Price True-Up - \$/MWh	\$0.00	= line 10/ line 12 - rounded to 2 decimal places

## Development of Capacity Proxy Price True-Up - \$/MWh Using 2022/2023 Illustrative Data for RECO

-	2022/23	
	Delivery Year	Notes:
1 PJM Final Zonal Net Load Price (\$/MW-day) - Zone	\$155.00	PJM RPM Final Zonal Net Load Price - Zone
2 Capacity Proxy Price (\$/MW-day)	\$152.06	
3 Capacity Proxy Price True-Up - \$/MW-day	\$2.94	= line 1 - line 2
4 BGS-RSCP Gen Obl - MW	389.1	
5 Days in Year	365	
6 Capacity Proxy Price True-Up Annual Cost	\$417,578.62	= line 3 * line 4 * line 5
7 Eligible Tranches	2	from Table A
8 Total Tranches	4	from Table A
9 % of tranches eligible for payment	50.00%	= line 7 / line 8
10 Capacity Proxy Price True-Up Cost	\$208,789	= line 6 * line 9
11 Total Applicable Customer Usage @ transmission nodes - in MWh	981,044	
12 Eligible Customer Usage @ transmission nodes - in MWh	490,522	= line 9 * line 11
13 Capacity Proxy Price True-Up - \$/MWh	\$0.43	= line 10/ line 12 - rounded to 2 decimal places

2022 BGS Auction

#### Table A Weighted Average Price Calculation

VectorAuction 36 MonthAuction 48 MonthAuction 48 MonthAuction1Tranches2114Form then-current auction (Note: 220 Auction Price Shown for Illustrative Purposes Only) Entred After 2022 BGS Auction 2 (20)Form then-current auction (Note: 220 Auction Price Shown for Illustrative Purposes Only) Entred After 2022 BGS Auction 2 (20)Note: 220 Auction Price Shown for Illustrative Purposes Only) Entred After 2022 BGS Auction = 2(2) + 2(b)2(1)Vinning Bid Price (AWN)*8.8468.8038.803 <th></th> <th></th> <th>2020</th> <th>2021</th> <th>2022</th> <th></th> <th></th>			2020	2021	2022		
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $			Auction	Auction	Auction		
1       Tranches       2       1       1       4       From ther-current auction         (20)       Winning Bid Price (dk/Wh)*       8.03       8.03       (Note: 202 Auction Price Show for Illustrative Purposes Only)         (20)       Winning Bid Price (dk/Wh)*       0.043       0.000       Entered Atter 2022 BGS Auction         (21)       Winning Bid Price (dk/Wh)*       8.046       8.03       2.01320       Average transmission cost included in bid         (21)       Transmission (dk/Wh)       1.320       1.320       1.320       Average transmission cost included in bid         (4)       BGS (gk/Wh)       7.528       7.483       7.483       =(2) - (3)       =(1) / Total Tranches * (4)         (4)       Weighted Avg Total Price (dk/Wh)       0.660       0.330       0.330       1.320       =(1) / Total Tranches * (3)         8       Seasonal Payment Factors       Seasonal Payment Factors       Nonter 1.0000       1.0000 **       From then-current Bid Factor Spreadsheet         10       Summer       1.0000       1.0000       1.0000 **       From then-current Bid Factor Spreadsheet         11       Winter MWh       3691.997       8.691.997       34.764.388       = (1) / Total Tranches * (2c) / 100 * (1) * 1,000         12       Total       Summer 17.382.194 </td <td>Line #</td> <td>Specific BGS-FP Auction &gt;&gt;</td> <td>36 Month</td> <td>36 Month</td> <td>36 Month</td> <td>Total</td> <td>Notes:</td>	Line #	Specific BGS-FP Auction >>	36 Month	36 Month	36 Month	Total	Notes:
2(a)       Winning Bid Price (ckWh)*       8.803       8.803       8.803       (Note: 2022 Auction Price Shown for Illustrative Purposes Only)         2(b)       Capacity Proxy Price Ture $p - in (ckWh)*$ 8.846       8.803       8.803 $= 2(a) + 2(b)$ 3       Transmission (ckWh)       8.846       8.803       8.803 $= 2(a) + 2(b)$ 3       Total Sing (ckWh)       7.528       7.483       7.483 $= (2) \cdot (3)$ 4       BGS (ckWh)       7.528       7.483       7.483 $= (2) \cdot (3)$ 6       Weighted Avg BGS       3.763       1.871       1.871       7.504 $= (1) \cdot Total Tranches * (4)$ 6       Weighted Avg BGS       3.763       1.871       1.871       8.825 $= (1) \cdot Total Tranches * (4)$ 7       Weighted Avg BGS       3.763       1.671       1.0000       1.0000       *       From then-current Bid Factor Spreadsheet         8       Summer       1.0000       1.0000       1.0000       *       From then-current Bid Factor Spreadsheet         11       Winter       586.129       Summer       12.882.194       8.691.097       34.764.388 $= (1) \cdot Total Tranches * (2c) / 100 * (8) * (10) * 1.000       = (1) \cdot Total Tranches * (2c) / 100 * (8) * (10) * 1.000    $	1	Tranches	2	1	1	4	From then-current auction
2(b)       Capacity Prox Prior Turu-up-in (ek/Wh)*       0.043       0.000       Entered After 2022 BGS Auction         2(b)       Comming Bid Price (ek/Wh)*       8.846       8.803       = (a) + 2(b)         3       Transmission (ek/Wh)*       1.320       1.320       Average transmission cost included in bid         4       BGS (ek/Wh)       7.526       7.483       7.483       -(2) - (3)         6       Weighted Avg Tass       0.660       0.330       0.330       1.220       = (1) / Total Tranches * (4)         6       Weighted Avg Tass       0.660       0.330       0.300       1.200       = (1) / Total Tranches * (3)         7       Weighted Avg Tass       0.660       0.330       0.000       *       From then-current Bid Factor Spreadsheet         8       Summer       1.0000       1.0000       1.0000 **       From then-current Bid Factor Spreadsheet         11       Winter MWh       394,145       From then-current Bid Factor Spreadsheet       From then-current Bid Factor Spreadsheet         12       Winter MWh       394,195       From then-current Bid Factor Spreadsheet       From then-current Bid Factor Spreadsheet         13       Summer Tasse       Summer Tasse       12,299,238       12,699,238       15,66,622       (1)// Total Tranches* (2c) /	2(a)	Winning Bid Price (¢/kWh)*	8.803	8.803	8.803		(Note: 2022 Auction Price Shown for Illustrative Purposes Only)
	2(b)	Capacity Proxy Price True-up - in (¢/kWh)*	0.043		0.000		Entered After 2022 BGS Auction
3       Tansmission (eWNh)       1.320       1.320       Average transmission cost included in bid         4       BCS (eWNh)       7.526       7.483       7.483       =(2) - (3)         5       Weighted Avg BCS       3.763       1.871       1.871       7.504       =(1) / Total Tranches * (4)         6       Weighted Avg Total Price (eKWh)       822       =(1) / Total Tranches * (3)       =(1) / Total Tranches * (3)         Seasonal Payment Factors         8       Summer       1.0000       1.0000       *       From then-current Bid Factor Spreadsheet         9       Winter       1.0000       1.0000       *       From then-current Bid Factor Spreadsheet         10       Summer       17.382,194       8.691,097       8.691,097       34,764,388       = (1) / Total Tranches * (2c) / 100 * (8) * (10) * 1,000         14       Winter MWh       585,122       Summer       17.382,194       8.691,097       34,764,388       = (1) / Total Tranches * (2c) / 100 * (8) * (10) * 1,000         15       Total Cost       Total 43,180,670       21,590,335       21,590,335       86,361,340       = (1) / Total Tranches * (2c) / 100 * (8) * (10) * 1,000         16       Summer       8.803 c/kWh       = sum(line 13) / (10) / 1000 * 100 rounded to 3 decimal places       = sum(line	2(C)	Winning Bid Price (¢/kWh)*	8.846	8.803	8.803		= 2(a) + 2(b)
4       BOS (ekWh)       7.526       7.483       -(2) - (3)         5       Weighted Avg Total Price (ekWh)       7.526       7.483       -(1)/ Total Tranches * (4)         6       Weighted Avg Total Price (ekWh)       0.660       0.330       0.330       1.320       = (1)/ Total Tranches * (4)         7       Weighted Avg Total Price (ekWh)       8.825       -(1)/ Total Tranches * (4)       = (1)/ Total Tranches * (4)         8       Summer       1.0000       1.0000       1.0000 **       From then-current Bid Factor Spreadsheet         9       Winter       1.0000       1.0000       1.0000 **       From then-current Bid Factor Spreadsheet         10       Summer MWh       394.915       Statumer       From then-current Bid Factor Spreadsheet         11       Winter MWh       384.915       Statumer       From then-current Bid Factor Spreadsheet         12       Winter 25.788.476       12.899.238       12.899.238       11.566.952       = (1)/ Total Tranches * (2c) / 100 * (0) * (10) * 1.000         14       Winter       25.788.476       12.899.238       12.899.238       11.566.952       = (1)/ Total Tranches * (2c) / 100 * (0) * (11) * 1.000         15       Summer       17.382.194       8.691.097       36.61.097       36.61.340       = (1)/ Total Tranches * (2c	3	Transmission (¢/kWh)	1.320	1.320	1.320		Average transmission cost included in bid
5       Weighted Avg GSS       3.763       1.871       7.504       = (1) / Total Tranches * (4)         6       Weighted Avg Total Price (#kWh)       8.825       = (1) / Total Tranches * (3)         7       Weighted Avg Total Price (#kWh)       8.825         8       Summer 1.0000       1.0000       1.0000 **         9       Winter       1.0000       1.0000       *         10       Summer MWh       394,915       From then-current Bid Factor Spreadsheet         11       Winter 1.0000       1.0000       *       From then-current Bid Factor Spreadsheet         12       Winter 1.282,194       8.691.097       34,764.388       = (1) / Total Tranches * (2c) / 100 * (8) * (10) * 1,000         14       Winter 22,798.476       12,899.238       12,899.238       51,586.352       = (1) / Total Tranches * (2c) / 100 * (8) * (10) * 1,000         15       Total Cost       Summer 8.803 #/kWh       = sum(line 13) / (10) / 1000 * 100 rounded to 3 decimal places         16       Summer 8.803 #/kWh       = sum(line 13) / (10) / 1000 * 100 rounded to 3 decimal places         17       Tranches 4       0.536       4.536         18       Total       8.603       5.514         19       Tranches 1.320       0.000       1.164       = (20) - (21)	4	BGS (¢/kWh)	7.526	7.483	7.483		=(2) - (3)
6       Weighted Avg Trans       0.660       0.330       0.330       1.320       = (1) / Total Tranches * (3)         7       Weighted Avg Total Price (#kWh)       88.25       88.25       88.25         8       Summer       1.0000       1.0000       1.0000 **       From then-current Bid Factor Spreadsheet         9       Winter       1.0000       1.0000       1.0000 **       From then-current Bid Factor Spreadsheet         10       Summer MWh       394.915       From then-current Bid Factor Spreadsheet         11       Winter MWh       394.915       From then-current Bid Factor Spreadsheet         12       Summer MWh       394.915       From then-current Bid Factor Spreadsheet         11       Winter MWh       394.915       From then-current Bid Factor Spreadsheet         12       Summer       17,382.194       8,691.097       34,764.388       = (1) / Total Tranches * (2c) / 100 * (8) * (10) * 1,000         13       Summer       17,382.194       8,691.097       34,764.388       = (1) / Total Tranches * (2c) / 100 * (8) * (10) * 1,000         14       Winter       8.803 ¢/kWh       sum(line 13) / (10) / 1000 * 100 rounded to 3 decimal places       = sum(line 13) / (10) / 1000 * 100 rounded to 3 decimal places         18       Tranches       Auetage Cost (Including RECO RFP	5	Weighted Avg BGS	3.763	1.871	1.871	7.504	= (1) / Total Tranches * (4)
7Weighted Avg Total Price (e/kWh)8.825Seasonal Payment Factors Summer LineSummer1.00001.0000**From then-current Bid Factor Spreadsheet From then-current Bid Factor SpreadsheetApplicable Customer Usage @ transmission nodes Winter MWh(Eastern Division)From then-current Bid Factor Spreadsheet10Summer MWh394,915From then-current Bid Factor Spreadsheet11Winter MWh596,122From then-current Bid Factor Spreadsheet12Winter MWh596,123From then-current Bid Factor Spreadsheet13Summer17,382,1948,691,0978,691,09734,764,388 21,590,335=(1) / Total Tranches * (2c) / 100 * (8) * (10) * 1,00014Winter MWh596,12321,590,33521,590,335=(1) / Total Tranches * (2c) / 100 * (8) * (10) * 1,00015Summer17,382,1948,691,0978,691,09734,764,388 21,590,335=(1) / Total Tranches * (2c) / 100 * (8) * (10) * 1,00016Summer8,803, ekWh=sum(line 13) / (10) / 1000 rounded to 3 decimal places=(1) / Total Tranches * (2c) / 100 * (9) * (11) * 1,00016Summer8,803, ekWh=sum(line 13) / (10) / 1000 rounded to 3 decimal places17Tranches8,803, ekWh=sum(line 13) / (10) / 1000 rounded to 3 decimal places18Total8,803, ekWh=sum(line 13) / (10) / 1000 * 100 rounded to 3 decimal places19Tranches4,05364,536Holdes RECO RFP equivalent tranches19Tranches1,3200.0001,16420	6	Weighted Avg Trans	0.660	0.330	0.330	1.320	= (1) / Total Tranches * (3)
$ \frac{\text{Seasonal Payment Factors}}{\text{Winter}}  \frac{10000}{1.0000}  \frac{10000}{1.0000}  \frac{10000}{1.0000}  \frac{1}{10000}  \frac{1}{1000}  $	7	Weighted Avg Total Price (¢/kWh)				8.825	
Seasonal Payment Factors8Summer1.00001.00001.0000 **From then-current Bid Factor Spreadsheet10Summer MWh394,915From then-current Bid Factor Spreadsheet11Winter MWh394,915From then-current Bid Factor Spreadsheet12Summer MWh394,915From then-current Bid Factor Spreadsheet11Winter MWh398,129From then-current Bid Factor Spreadsheet12Total CostFrom then-current Bid Factor Spreadsheet13Summer17.382,1948.691,09714Summer25.798,47612.899,23815Summer25.798,47612.899,23815Total d 3,180,67021,590,33516Summer8.803 ¢/kWh17Summer8.803 ¢/kWh18Summer8.803 ¢/kWh19Tranches419Tranches419Tranches410Price ¢/kWhBGS28GS5.51429Price ¢/kWhEGS21Transmission1.32020Price ¢/kWh5.51421Transmission1.32022SGS6.599235.51424Weighted Avg Trans24Weighted Avg Trans25Weighted Avg Total Price26Weighted Avg Total Price28Weighted Avg Total Price29State20Yice ¢/kWh201.64 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>							
8Summer1.00001.00001.0000**From then-current Bid Factor Spreadsheet9Winter1.00001.00001.0000**From then-current Bid Factor Spreadsheet10Summer MWh394,915From then-current Bid Factor SpreadsheetFrom then-current Bid Factor Spreadsheet11Winter MWh586,129From then-current Bid Factor Spreadsheet12Vinter MWh586,129From then-current Bid Factor Spreadsheet13Summer 17,382,1948,691,09734,764,388=(1) / Total Tranches * (2c) / 100 * (8) * (10) * 1,00014Winter25,798,47612,899,23851,596,952=(1) / Total Tranches * (2c) / 100 * (8) * (10) * 1,00016Summer8,803 c/kWh= sum(line 13) / (10) / 1000 * 100 rounded to 3 decimal places17Summer8,803 c/kWh= sum(line 13) / (10) / 1000 * 100 rounded to 3 decimal places18Average Cost (Including RECO RFP)EGSFotal19Tranches40.5364.53619Tranches1.3200.000=(20) - (21)21Transmission1.3200.000=(20) - (21)22Weighted Avg BGS6.5990.6527.25024Weighted Avg BGS6.5990.6527.25024Weighted Avg BGA6.5990.6527.25024Weighted Avg BGA6.5990.6527.25024Weighted Avg BGA6.5990.6527.25024Weighted Avg BGA6.5990.652<		Seasonal Payment Factors					
9Winter1.0001.0001.000**From then-current Bid Factor Spreadsheet10Summer MWh394,915Statewide AuctionFrom then-current Bid Factor Spreadsheet11Winter MWh586,129From then-current Bid Factor Spreadsheet12Total CostFrom then-current Bid Factor Spreadsheet13Summer17,382,1948,691,09734,764,38814Summer17,382,1948,691,09734,764,38815Summer12,899,23812,899,23851,596,95216Total43,180,67021,590,33521,590,33517Total43,180,67021,590,33521,590,33518Average Cost (NJ Statewide Auction)= sum(line 13) / (10) / 1000 * 100 rounded to 3 decimal places18Summer8.803¢/kWh= sum(line 13) / (10) / 1000 * 100 rounded to 3 decimal places19Tranches40.5364.53619Tranches40.5364.53619Transmission1.3200.000= (20) · (21)20Price ¢/kWh8.8035.514= (20) · (21)21Transmission1.3200.000= (19) / Total Tranches * (22)22BGS7.4835.514= (20) · (21)23Weighted Avg BGS6.5990.6527.25024Weighted Avg Total Price8.414= (23) + (24)	8	Summer	1.0000	1.0000	1.0000 *	*	From then-current Bid Factor Spreadsheet
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	9	Winter	1.0000	1.0000	1.0000 *	*	From then-current Bid Factor Spreadsheet
$\frac{\text{Applicable Customer Usage @ transmission nodes}}{\text{Summer WWh}} 394,915 From then-current Bid Factor Spreadsheet $							
10       Summer MWh       394,915       From then-current Bid Factor Spreadsheet         11       Winter MWh       586,129       From then-current Bid Factor Spreadsheet         12       Total Cost       From then-current Bid Factor Spreadsheet         13       Summer       17,382,194       8,691,097       34,764,388       = (1) / Total Tranches * (2c) / 100 * (8) * (10) * 1,000         14       Winter       25,798,476       12,899,238       51,596,952       = (1) / Total Tranches * (2c) / 100 * (9) * (11) * 1,000         15       Total       43,180,670       21,590,335       21,590,335       86,361,340       = (1) / Total Tranches * (2c) / 100 * (9) * (11) * 1,000         16       Summer       8.803 ¢/kWh       = sum(line 13) / (10) / 1000 rounded to 3 decimal places         17       Winter       8.803 ¢/kWh       = sum(line 15) / (12) / 1000 * 100 rounded to 3 decimal places         18       Total       8.803 ¢/kWh       = sum(line 15) / (12) / 1000 * 100 rounded to 3 decimal places         19       Tranches       4       0.536       4.536         19       Tranches       4       0.536       4.536         19       Tranches       4       0.536       4.536         10       Price ¢/kWh       8.803       5.514       E(20) - (21)		Applicable Customer Usage @ transmission node	<u>es</u>	(E	astern Division)		
11       Winter MWh       526,129       From then-current Bid Factor Spreadsheet         12       981,044       From then-current Bid Factor Spreadsheet         13       Summer       17,382,194       8,691,097       34,764,388       = (1) / Total Tranches * (2c) / 100 * (8) * (10) * 1,000         14       Winter       25,798,476       12,899,238       12,899,238       51,596,952       = (1) / Total Tranches * (2c) / 100 * (9) * (11) * 1,000         15       Total       43,180,670       21,590,335       21,590,335       86,361,340       = (13) + (14)         6       Summer       8.803 ¢/kWh       = sum(line 13) / (10) / 1000 * 100 rounded to 3 decimal places         18       Total       8.803 ¢/kWh       = sum(line 14) / (11) / 1000 * 100 rounded to 3 decimal places         18       Total       8.803 ¢/kWh       = sum(line 14) / (12) / 1000 * 100 rounded to 3 decimal places         19       Tranches       4       0.536       4.536         19       Tranches       4       0.536       4.536         19       Transmission       1.320       0.000       (excludes transmission).         21       Transmission       1.320       0.000       (14)       = (20) - (21)         23       Weighted Avg BGS       6.599       0.652 <t< td=""><td>10</td><td>Summer MWh</td><td>394,915</td><td></td><td></td><td></td><td>From then-current Bid Factor Spreadsheet</td></t<>	10	Summer MWh	394,915				From then-current Bid Factor Spreadsheet
12       981,044         Total Cost         13       Summer       17,382,194       8,691,097       34,764,388       = (1) / Total Tranches * (2c) / 100 * (6) * (10) * 1,000         14       Winter       25,798,476       12,899,238       12,899,238       51,596,952       = (1) / Total Tranches * (2c) / 100 * (9) * (11) * 1,000         15       Total       43,180,670       21,590,335       21,590,335       86,361,340       = (13) + (14)         16       Summer       8.803 ¢/kWh       = sum(line 13) / (10) / 1000 * 100 rounded to 3 decimal places         18       Winter       8.803 ¢/kWh       = sum(line 15) / (12) / 1000 * 100 rounded to 3 decimal places         19       Tranches       4       0.536       4.536       Includes RECO RFP equivalent tranches         19       Tranches       4       0.536       4.536       Includes RECO RFP equivalent tranches         19       Transmission       1.320       0.000       EGS       7.483       5.514       = (20) - (21)         21       Transmission       1.364       0.000       1.164       = (20) - (21)       210 - (21)         23       Weighted Avg BGS       6.599       0.652       7.250       = (19) / Total Tranches * (22)         24       Weighted Avg	11	Winter MWh	<u>586,129</u>				From then-current Bid Factor Spreadsheet
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	12		981,044				
India Cost       India Cost <thindia cost<="" th="">       India Cost       India Cost<td></td><td>Tatal Cost</td><td></td><td></td><td></td><td></td><td></td></thindia>		Tatal Cost					
13       Summer       17,322,134 $6,091,097$ $34,709,386$ $= (1)7$ for larranches $(2c)7100$ $(6)71,000$ 14       Winter $25,798,476$ $12,899,238$ $12,899,238$ $51,596,952$ $= (1)7$ for larranches $(2c)7100$ $(9)^{\circ}(11)^{\circ}(10)^{\circ}(10)^{\circ}(9)^{\circ}(11)^{\circ}(10)$	12	Total Cost	17 292 104	9 601 007	9 601 007	21 761 200	-(1)/Total Transhee * (2a)/(100 * (8) * (10) * 1,000)
14Willer $22/39/236$ $12.039/236$ $11/30/352$ $= (1)^{1}$ four franches (20) four (9) (11) 1,00015Total43,180,670 $21,590,335$ $21,590,335$ $86,361,340$ $= (13) + (14)$ 16Summer $8.803 \ e/kWh$ $= sum(line 13) / (10) / 1000 \ 100$ rounded to 3 decimal places17Winter $8.803 \ e/kWh$ $= sum(line 13) / (10) / 1000 \ 100$ rounded to 3 decimal places18Total $8.803 \ e/kWh$ $= sum(line 15) / (12) / 1000 \ 100$ rounded to 3 decimal places19Tranches4 $0.536$ $4.536$ 19Tranches4 $0.536$ $4.536$ 19Tranches4 $0.536$ $4.536$ 20Price $e/kWh$ $8.803 \ 5.514$ BGS Auction from (18) Note $5.514e$ for RFP is illustrative (excludes transmission).21Transmission $1.320 \ 0.000$ $= (20) - (21)$ 23Weighted Avg BGS $6.599 \ 0.652$ $7.250 \ = (19) / Total Tranches \ (22)$ 24Weighted Avg Trans $1.164 \ 0.000$ $1.164 \ = (23) + (24)$	13	Winter	7,302,194	12 900 229	12 800 228	54,704,500	= (1) / 101a   11anches (2c) / 100 (6) (10) 1,000 = (1) / Total Tranches * (2c) / 100* (0) * (11) * 1,000
Total43, 100,01021,390,33360,301,340= (13) + (14)Average Cost (NJ Statewide Auction)16Summer8.803 ¢/kWh= sum(line 13) / (10) / 100 * 100 rounded to 3 decimal places17Winter8.803 ¢/kWh= sum(line 14) / (11) / 1000 * 100 rounded to 3 decimal places18Total8.803 ¢/kWh= sum(line 15) / (12) / 1000 * 100 rounded to 3 decimal placesAverage Cost (Including RECO RFP)19Tranches40.5364.53620Price ¢/kWh8.8035.514BGS Auction from (18)Note 5.514¢ for RFP is illustrative (excludes transmission).21Transmission1.3200.000=22BGS7.4835.514= (20) - (21)23Weighted Avg BGS6.5990.6627.250= (19) / Total Tranches * (22)24Weighted Avg Trans1.1640.0001.164= (19) / Total Tranches * (21)25Weighted Avg Total Price8.414= (23) + (24)	14	Vinter	<u>23,790,470</u>	12,099,230	12,099,230	<u>31,390,932</u> 96,361,340	= (1) / 10(a) 11anches (2c) / 100 (9) (11) 1,000 = (12) + (14)
Average Cost (NJ Statewide Auction)= sum(line 13) / (10) / 100 ° 100 rounded to 3 decimal places = sum(line 14) / (11) / 1000 ° 100 rounded to 3 decimal places = sum(line 15) / (12) / 1000 ° 100 rounded to 3 decimal places = sum(line 15) / (12) / 1000 ° 100 rounded to 3 decimal places = sum(line 15) / (12) / 1000 ° 100 rounded to 3 decimal places = sum(line 15) / (12) / 1000 ° 100 rounded to 3 decimal places = sum(line 15) / (12) / 1000 ° 100 rounded to 3 decimal placesAverage Cost (Including RECO RFP)BGS 	15	lotal	43,160,070	21,090,000	21,590,555	00,301,340	=(13)+(14)
Integration of the second s		Average Cost (NJ Statewide Auction)					
17Winter Total8.803 ¢/kWh= sum(line 14) / (11) / 1000 * 100 rounded to 3 decimal places = sum(line 15) / (12) / 1000 * 100 rounded to 3 decimal places18Total8.803 ¢/kWh= sum(line 15) / (12) / 1000 * 100 rounded to 3 decimal places = sum(line 15) / (12) / 1000 * 100 rounded to 3 decimal placesAverage Cost (Including RECO RFP)BGSRECO AuctionTotal19Tranches40.53664.536Includes RECO RFP equivalent tranches20Price ¢/kWh8.8035.514BGS Auction from (18)Note 5.514¢ for RFP is illustrative (excludes transmission).21Transmission1.3200.000=22BGS7.4835.514= (20) - (21)23Weighted Avg BGS6.5990.6527.250= (19) / Total Tranches * (22)24Weighted Avg Trans1.1640.0001.164= (19) / Total Tranches * (21)25Weighted Avg Total Price8.414= (23) + (24)	16	Summer	8.803 (	t∕kWh			= sum(line 13) / (10) / 1000 * 100 rounded to 3 decimal places
18Total8.803 ¢/kWh= sum(line 15) / (12) / 1000 * 100 rounded to 3 decimal placesAverage Cost (Including RECO RFP)BGSRECO19Tranches40.5364.53620Price ¢/kWh8.8035.514Includes RECO RFP equivalent tranches20Price ¢/kWh8.8035.514BGS Auction from (18)Note 5.514¢ for RFP is illustrative (excludes transmission).21Transmission1.3200.000 $= (20) - (21)$ 22BGS7.4835.514 $= (20) - (21)$ 23Weighted Avg BGS6.5990.6527.25024Weighted Avg Trans1.1640.0001.16425Weighted Avg Total Price8.414 $= (23) + (24)$	17	Winter	8.803	t/kWh			= sum(line 14) / (11) / 1000 * 100 rounded to 3 decimal places
Average Cost (Including RECO RFP)BGSRECOAuctionRFPTotal19Tranches420Price ¢/kWh8.8035.5149Price ¢/kWh8.8035.5149BGS1Transmission21Transmission22BGS7.4835.51423Weighted Avg BGS6.5990.65224Weighted Avg Trans1.1640.0001.164= (19) / Total Tranches * (21)25Weighted Avg Total Price	18	Total	8.803	t/kWh			= sum(line 15) / (12) / 1000 * 100 rounded to 3 decimal places
Average Cost (Including RECO RFP)       BGS       RECO         Auction       RFP       Total         19       Tranches       4       0.536       4.536       Includes RECO RFP equivalent tranches         20       Price ¢/kWh       8.803       5.514       BGS Auction from (18) Note 5.514¢ for RFP is illustrative (excludes transmission).         21       Transmission       1.320       0.000       = (20) - (21)         22       BGS       7.483       5.514       = (20) - (21)         23       Weighted Avg BGS       6.599       0.652       7.250       = (19) / Total Tranches * (22)         24       Weighted Avg Trans       1.164       0.000       1.164       = (19) / Total Tranches * (21)         25       Weighted Avg Total Price       8.414       = (23) + (24)       Exercise transmission							
BGSRECO AuctionRFPTotal19Tranches40.5364.536Includes RECO RFP equivalent tranches20Price ¢/kWh8.8035.514BGS Auction from (18) (excludes transmission).Note 5.514¢ for RFP is illustrative (excludes transmission).21Transmission1.3200.000=22BGS7.4835.514= (20) - (21)23Weighted Avg BGS6.5990.6527.250= (19) / Total Tranches * (22)24Weighted Avg Trans1.1640.0001.164= (19) / Total Tranches * (21)25Weighted Avg Total Price8.414= (23) + (24)=		Average Cost (Including RECO RFP)					
AuctionRFPTotal19Tranches40.5364.536Includes RECO RFP equivalent tranches20Price ¢/kWh8.8035.514BGS Auction from (18) Note 5.514¢ for RFP is illustrative (excludes transmission).21Transmission1.3200.00022BGS7.4835.514= (20) - (21)23Weighted Avg BGS6.5990.6527.250= (19) / Total Tranches * (22)24Weighted Avg Trans1.1640.0001.164= (19) / Total Tranches * (21)25Weighted Avg Total Price8.414= (23) + (24)			BGS	RECO			
19Tranches40.5364.536Includes RECO RFP equivalent tranches20Price ¢/kWh8.8035.514BGS Auction from (18) (excludes transmission).Note 5.514¢ for RFP is illustrative (excludes transmission).21Transmission1.3200.000=22BGS7.4835.514= (20) - (21)23Weighted Avg BGS6.5990.6527.250= (19) / Total Tranches * (22)24Weighted Avg Trans1.1640.0001.164= (19) / Total Tranches * (21)25Weighted Avg Total Price8.414= (23) + (24)			Auction	<u>RFP</u>		Total	
20       Price ¢/kWh       8.803       5.514       BGS Auction from (18) (excludes transmission).       Note 5.514¢ for RFP is illustrative (excludes transmission).         21       Transmission       1.320       0.000       = (20) - (21)       = (20) - (21)         23       Weighted Avg BGS       6.599       0.652       7.250       = (19) / Total Tranches * (22)         24       Weighted Avg Trans       1.164       0.000       1.164       = (19) / Total Tranches * (21)         25       Weighted Avg Total Price       8.414       = (23) + (24)       = (23) + (24)	19	Tranches	4	0.536		4.536	Includes RECO RFP equivalent tranches
21       Transmission       1.320       0.000         22       BGS       7.483       5.514       = (20) - (21)         23       Weighted Avg BGS       6.599       0.652       7.250       = (19) / Total Tranches * (22)         24       Weighted Avg Trans       1.164       0.000       1.164       = (19) / Total Tranches * (21)         25       Weighted Avg Total Price       8.414       = (23) + (24)	20	Price ¢/kWh	8.803	5.514			BGS Auction from (18) Note 5.514¢ for RFP is illustrative
21       Transmission       1.320       0.000         22       BGS       7.483       5.514       = (20) - (21)         23       Weighted Avg BGS       6.599       0.652       7.250       = (19) / Total Tranches * (22)         24       Weighted Avg Trans       1.164       0.000       1.164       = (19) / Total Tranches * (21)         25       Weighted Avg Total Price       8.414       = (23) + (24)							(excludes transmission).
22       BGS       7.483       5.514       = (20) - (21)         23       Weighted Avg BGS       6.599       0.652       7.250       = (19) / Total Tranches * (22)         24       Weighted Avg Trans       1.164       0.000       1.164       = (19) / Total Tranches * (21)         25       Weighted Avg Total Price       8.414       = (23) + (24)	21	Transmission	1.320	0.000			
23       Weighted Avg BGS       6.599       0.652       7.250       = (19) / Total Tranches * (22)         24       Weighted Avg Trans       1.164       0.000       1.164       = (19) / Total Tranches * (21)         25       Weighted Avg Total Price       8.414       = (23) + (24)	22	BGS	7.483	5.514			= (20) - (21)
24       Weighted Avg Trans       1.164       0.000       1.164       = (19) / Total Tranches * (21)         25       Weighted Avg Total Price       8.414       = (23) + (24)	23	Weighted Avg BGS	6.599	0.652		7.250	= (19) / Total Tranches * (22)
25         Weighted Avg Total Price         8.414         = (23) + (24)	24	Weighted Avg Trans	1.164	0.000	—	1.164	= (19) / Total Tranches * (21)
	25	Weighted Avg Total Price				8.414	= (23) + (24)

\* Includes Impact of PJM Marginal Losses

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