

## **D. RSCP SUPPLIER PAYMENTS AND CUSTOMER RATES**

*This summary is provided for bidder convenience only. Any statements herein describing BGS-RSCP rates or supplier payments are summaries only and are qualified in their entirety by each EDC's Company Specific Addendum and accompanying attachments, as well as the BGS-RSCP Supplier Master Agreement posted to the [BGS Proceeding](#) page of the BGS Auction website. Bidders bear full responsibility for reviewing each EDC's Company Specific Addendum and accompanying attachments, as well as the BGS-RSCP Supplier Master Agreement.*

The EDCs are Public Service Electric and Gas Company ("PSE&G"), Jersey Central Power & Light Company ("JCP&L"), Atlantic City Electric Company ("ACE"), and Rockland Electric Company ("RECO").

### **D.1. Overview**

The BGS-RSCP Auction is a rolling procurement that each year aims to procure supply for approximately one-third of the BGS-RSCP Load for three years.

The EDCs propose that BGS-RSCP customers pay rates that are determined by the weighted average cost of supply for all three (3) Auctions used for supply at a given point in time and on the basis of conversion factors specific to each rate class. The EDCs propose to pay winners of a BGS-RSCP Auction for an EDC the final auction price for that EDC times a seasonal billing factor. The proposed seasonal billing factor is 1 for both seasons and for all EDCs.

### **D.2. Retail Customer Rates**

#### **D.2.a. Weighted Average Cost of Supply**

For the period June 1, 2019 to May 31, 2020, BGS-RSCP Load would be supplied by the winners of three (3) BGS-RSCP Auctions: winners with a three-year contract ending on May 31, 2020, winners with a three-year contract ending May 31, 2021, and winners with a three-year contract from the upcoming Auction that would end May 31, 2022.

We use PSE&G as an example to illustrate the composition of supply. The seasonal billing factors for the 2019 Auction are those proposed in the EDCs' filing. The price for the 2019 Auction is purely illustrative.

**Table D-1. Example Composition of BGS-RSCP Supply for PSE&G**

<b>Auction</b>	<b>Product</b>	<b>Number of Tranches</b>	<b>Final Auction Price (¢/kWh)</b>	<b>Seasonal Billing Factors</b>
<b>2019</b>	3-year term	28	9.328 (illustrative)	Summer – 1.0000 Winter – 1.0000 (proposed)
<b>2018</b>	3-year term (2 years remaining)	29	9.177	
<b>2017</b>	3-year term (1 year remaining)	28	9.078	

Given this composition of supply, the weighted average cost of supply would be calculated as follows.

For each component auction product and for each season, the clearing price is multiplied by the seasonal billing factor and by the number of tranches. The sum is taken for each season and is divided by the total number of tranches. The result is a price for each season. These prices are weighted by the proportion of BGS-RSCP energy at the bulk system level<sup>1</sup> projected to occur in each season to obtain a single value – a seasonally-adjusted weighted price. This seasonally-adjusted weighted price is the weighted average cost of supply for all the component auction products used to serve load for the June 1, 2019 to May 31, 2020 period.

Table D-2 illustrates each step for PSE&G assuming, purely for illustrative purposes, a final auction price in 2019 of 9.328¢/kWh.

---

<sup>1</sup> Energy at the bulk system level is the forecast energy de-rated pursuant to PJM's marginal loss implementation.

**Table D-2. Example Calculation**  
**Summer**

<u>Tranches</u>		<u>Seasonal Factor</u>		<u>Final Auction Price</u>		<u>Total</u>
28	x	1.0000	X	9.328	=	261.184
29	x	1.0000	X	9.177	=	266.133
28	x	1.0000	X	9.078	=	254.184
					Total	= 781.501
					Divided by total tranches (85)	= 9.194¢/kWh

**Winter**

<u>Tranches</u>		<u>Seasonal Factor</u>		<u>Final Auction Price</u>		<u>Total</u>
28	x	1.0000	X	9.328	=	261.184
29	x	1.0000	X	9.177	=	266.133
28	x	1.0000	X	9.078	=	254.184
					Total	= 781.501
					Divided by total tranches (85)	= 9.194¢/kWh

**Average**

	<u>Energy, GWh</u>		<u>Tranche-weighted Price</u>		<u>Total</u>	
Summer	10,430	X	9.194	=	95,893	
Winter	15,454	X	9.194	=	142,884	
Totals	25,971			=	238,777	
					Seasonally-adjusted weighted price	= 9.194¢/kWh

## D.2.b. Conversion Factors

Rates for each rate class are determined by multiplying the weighted average cost of supply by conversion factors for that rate class. The conversion factors are developed using the EDCs' rate design methodologies as provided in each EDC's Company Specific Addendum. Under this approach, a customer class that is more expensive to serve than the system on average would have a higher rate for electricity.

The methodology for developing the conversion factors begins by estimating the average cost per unit associated with supplying all BGS-RSCP customers. This "system average cost" is a simple and rough estimate that includes only factors easily determined from market and load data and excludes any estimate of uncertainty or risk. This system average cost is then compared to the cost for individual customer classes. This comparison becomes the basis for deriving the conversion factor for each customer class.

All the EDCs estimate system costs using the same approach. Costs including energy, capacity and transmission, are derived using inputs including:

- Load by rate class;
- Forward energy market prices;
- Off-peak price ratios by season, based on historical market prices;
- Congestion price ratios by EDC zone and by season, based on historical market price analysis;
- RPM capacity prices;
- Network transmission cost from the PJM OATT; and
- Estimated ancillary services and Compliance cost of the Renewable Portfolio Standards.

Inputs used by the EDCs are provided in the following two tables. (RECO used a weighting of PJM Western hub prices with NYISO forward prices, with NYISO prices receiving a 10.9% weighting. Please see RECO's Company Specific Addendum available on the [BGS Proceeding](#) page of the BGS Auction website for details.)

**Table D-3. PJM Western Hub Forward Prices as of June 2018**

Month	June	July	Aug.	Sept.	Oct.	Nov.
<b>On-Peak (\$/MWh)</b>	32.48	38.27	35.67	32.53	31.45	31.43
Month	Dec.	Jan.	Feb.	March	April	May
<b>On-Peak (\$/MWh)</b>	34.28	48.05	45.15	36.43	31.50	31.55

**Table D-4. BGS-RSCP Pricing Inputs**

		PSE&G	JCP&L	ACE	RECO <sup>2</sup>
<b>Off-peak/peak price ratio</b>	<b>Summer</b>	0.6402			
	<b>Winter</b>	0.7756			
<b>Peak zone congestion factor</b>	<b>Summer</b>	0.93	0.92	0.94	0.93
	<b>Winter</b>	0.95	0.91	0.92	0.95
<b>Off-peak zone congestion factor</b>	<b>Summer</b>	0.86	0.85	0.87	0.87
	<b>Winter</b>	0.95	0.93	0.93	0.94
<b>Capacity cost<sup>3</sup> (\$/MW-day)</b>	<b>Summer</b>	158.09	115.15	151.03	151.03
	<b>Winter</b>	158.09	115.15	151.03	151.03
<b>Ancillary services and renewables (\$/MWh)</b>		21.17			
<b>Network Transmission (\$/MW-year)</b>		97,911.84	**4	51,442	42,548

The conversion factors are derived by comparing the system average cost to the bulk system level costs for each rate class. In general, the conversion factor for a given customer class is the ratio of the bulk system level costs for the rate class to the system average cost. If this factor is, for example, 1.2, it indicates that the class is 1.2 times

<sup>2</sup> RECO's capacity and ancillary services cost estimates include a 10.9% weighting of corresponding NYISO estimated costs.

<sup>3</sup> For PSE&G, ACE, and RECO this capacity cost figure represents the three-year average RPM cost from June 1, 2019 to May 31, 2022, net of Capacity Transfer Rights ("CTRs"). JCP&L accounts for BGS costs on an individual year basis and this capacity cost figure represents the June 1, 2019 to May 31, 2020 RPM cost.

<sup>4</sup> JCP&L accounts for transmission cost by applying the applicable tariff rates by rate class. The other EDCs apply a constant rate to the transmission obligation.

more expensive to serve than the system as a whole. Thus, the retail rate to be paid by the class is set at 1.2 times the weighted average cost of supply.

Estimation of bulk system level cost uses projections. The sole purpose of these EDC projections is the determination of customer rates and seasonal billing factors. Bidders are not to rely on these projections whatsoever and bidders bear the entire responsibility of making any projections relevant to preparing their bids.

The Company Specific Addenda to the June 29, 2018 filing describe the specific rate design methodologies in detail. Additionally, each Company Specific Addendum contains a rate design spreadsheet that includes information on billing determinants by rate class and rate component, and draft tariff sheets. These spreadsheets, the “BGS-RSCP Pricing Factors spreadsheets”, are the same spreadsheets used to develop the seasonal billing factors. They are posted to both the [BGS Proceeding](#) page and the [BGS Additional Data](#) page of the BGS Auction website.

#### **D.2.c. Rate Adjustment Factors**

For PSE&G, ACE, and RECO, there are additional factors called Rate Adjustment Factors used to determine retail rates. The Rate Adjustment Factors are equal to the dollar differences between the anticipated billed revenue and supplier payments in a season, divided by the total anticipated billed BGS-RSCP energy-related charges in that season. (Note that RECO includes demand charges for its SC2 rate class when calculating SC2 anticipated billed revenue.) A difference arises between anticipated revenue and anticipated supplier payments because rate conversion factors for these three EDCs (and the seasonal billing factors for the Auction) are based on one year of cost data while the payments made to suppliers reflect seasonal billing factors from three different Auctions and three years of cost data. The Company Specific Addenda to the June 29, 2018 filing describe these rate adjustment factors in more detail. They are posted to the [BGS Proceeding](#) page of the BGS Auction website.

#### **D.2.d. JCP&L Variation**

The methodology used by JCP&L to derive conversion factors is slightly different from that used by the other EDCs. PSE&G, ACE, and RECO derive conversion factors using the cost inputs for the coming supply year only. For these three EDCs, the Rate Adjustment Factor is then used so that seasonal revenue and seasonal supplier payments correspond. JCP&L derives conversion factors by incorporating cost information from component products from all three Auctions used to supply the BGS-RSCP Load for the coming year. (See the description of Table C7 of the BGS-RSCP Pricing Factors spreadsheet in JCP&L’s Company Specific Addendum available on the [BGS Proceeding](#)

page of the BGS Auction website.) As a result, JCP&L does not require a specific Rate Adjustment Factor.

### **D.3. Retail Rates**

Draft tariff sheets have been posted to the [BGS Proceeding](#) page of the BGS Auction website as part of the June 29, 2018 filing.

After the BGS Auctions, the EDCs post on their own websites draft tariff sheets to become effective June 1 upon approval by the Board. Current tariff sheets are available at the following links:

[PSE&G Tariffs](#)

[JCP&L Tariffs](#)

[ACE Tariffs](#)

[RECO Tariffs](#)

### **D.4. Supplier Payment**

Each EDC pays its BGS-RSCP Suppliers the final auction price for that EDC times an EDC-specific seasonal billing factor. These EDC specific seasonal billing factors have been set to 1 for all EDCs for several years. This means that a BGS-RSCP Supplier for an EDC is paid the auction price for that EDC for each kWh of load served.

An EDC pays each BGS-RSCP Supplier for the portion of the EDC's BGS-RSCP Load represented by the number of tranches it has won at the Auction. The EDC issues a statement for each billing month and pays its BGS-RSCP Suppliers according to a preliminary allocation of BGS-RSCP energy. A final energy allocation for each month is produced subsequently and compared to the preliminary allocation. Any difference is reflected in a billing adjustment on future statements. If there are corrections or adjustments that would have resulted in changes in the PJM settlement, but the deadline for settlement has passed, the EDC settles the difference directly with the BGS-RSCP Supplier. BGS-RSCP Suppliers are paid based on energy volumes that PJM has de-rated for losses as part of marginal loss implementation procedures. The energy volume for which BGS-RSCP Suppliers are paid is equal to the energy volume for which they settle with PJM.

The proposed BGS-RSCP Supplier Master Agreement specifies the full details of the proposed payments. It is available on the [Contract and Credit](#) page of the BGS Auction website.