

**Calculation of the 2019 True Up and Forecast 2020 Market Price Benchmarks for the Power Charge Indifference Adjustment**

R. 17-06-026

November 1, 2019

Pursuant to Decision (D) 19-10-001, Energy Division issues the following calculation for the Power Charge Indifference Adjustment (PCIA) Forecast adders and True Up adders to be used as inputs in utilities 2020 Energy Resource Recovery Account (ERRA) Forecast Updates in November 2019. The PCIA includes the Market Price Benchmarks include the Energy Index, the Renewable Portfolio Standard (RPS) Adder, and the Resource Adequacy (RA) Adder, as defined in the decision.<sup>1</sup> D.19-10-001 directed Energy Division to complete the calculation of these values by the first business day in November each year, and to make the results available to interested parties. The results of these calculations are shown in the tables below.

**Table 1. Market Price Benchmarks Used in PCIA**

<b>2019 Final Adders</b>				
		<b>PG&amp;E</b>	<b>SDG&amp;E</b>	<b>SCE</b>
<b>RA Adder</b> (\$/kW-month)	System RA	\$2.77		
	Local RA	\$3.19	\$3.46	\$3.72
	Flexible RA	\$2.78		
<b>RPS Adder</b> (\$/MWh)		\$16.44		

<b>2020 Forecast Adders</b>				
		<b>PG&amp;E</b>	<b>SDG&amp;E</b>	<b>SCE</b>
<b>Energy Index<sup>2</sup></b> (\$/MWh)	On Peak	\$36.88	\$37.61	\$37.61
	Off Peak	\$29.93	\$29.56	\$29.56
<b>RA Adder</b> (\$/kW-month)	System RA	\$4.59		
	Local RA	\$4.11	\$4.15	\$4.30
	Flexible RA	\$4.41		
<b>RPS Adder</b> (\$/MWh)		\$17.35		

<sup>1</sup> D.19-10-001 at 7

<sup>2</sup> The Energy Index forecast adder is a calculated value based on Platts values; the final values are 2019 actual energy prices.

## **Market Price Benchmarks**

The calculation of the PCIA was established in D.11-12-018 and has most recently been refined in D.19-10-001.<sup>3</sup> A PCIA vintage, or a utilities' Indifference Amount for a given year, is equivalent to a utility's vintage Total Portfolio costs, less the vintage Market Value. Market Value is defined in D.19-10-001 as "the estimated financial value, measured in dollars, that is attributed to a utility portfolio of energy resources for the purpose of calculating the Power Charge Indifference Adjustment for a given year." D.19-10-001 defines Market Price Benchmarks as "estimates of the value per unit (not total portfolio value) associated with three principal sources of value in utility portfolios (energy, resource adequacy, and renewable energy)."<sup>4</sup> Market Price Benchmarks are multiplied by the relevant portfolio volume as part of the overall calculation of Market Value. The Forecasted Adders are components used in utilities' calculation of the 2020 PCIA Market Price and intended to reduce uncertainty in the indifference amount and True up Adders are used to adjust the 2019 forecast Adders for actual 2019 values.

## **RA Adder**

The RA Adder is the Market Price Benchmark that reflects the estimated value of each unit of capacity in a utility portfolio that can be used to satisfy Resource Adequacy obligations, as dollar value per kilowatt-year (\$/kW-year). The RA Adder has three subcomponents, reflecting each type of RA product required for compliance with the RA program: system, local, and flexible.<sup>5</sup>

- The Forecast RA Adder for system, flexible, and local RA were calculated using the volume-weighted average of all IOU, Community Choice Aggregator (CCA), and Electric Service Provider (ESP) RA-only market transactions executed in the fourth quarter of 2018, and the first through third quarter of 2019 for delivery in 2020. The annual Forecast RA Adder (\$/kW-year) is the sum of the monthly weighted average of the relevant transactions. Note that the time periods of data collected for the calculation of the Forecasted local RA Adder and Final Local RA adder will change in 2021 and again in 2022 and beyond.<sup>6</sup>
- The Final RA Adder for system, flexible, and local is calculated using the volume-weighted average of all IOU, CCA, and ESP RA-only market transactions executed in 2018 and first through third quarter of 2019 for delivery in 2019.

## **RPS Adder**

The RPS Adder is the Market Price Benchmark that reflects the estimated incremental value of each unit of RPS-eligible energy that is attributable to the fact of that eligibility, in \$/MWh.

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<sup>3</sup> The methodology of calculating the PCIA was mandated D.11-12-018 COL 3 and Resolution E-4475. Explanation of the changes to the methodology can be found in Appendix 1 of D. 18-10-019.

<sup>4</sup> D.19-10-001 at 6

<sup>5</sup> D.19-10-001 at 7

<sup>6</sup> D.19-10-001, Attachment A, at 1-2

Both the forecast and the final adder are based on transactions of bundled renewable energy credits (RECs) of the portfolio content Category 1 (PCC1)<sup>7</sup> and Index-plus<sup>8</sup> transactions.

- The Forecast RPS Adder was calculated using the volume weighted average of all IOU, CCA, and ESP market transactions using only PCC1 index-plus contracts executed in the fourth quarter of 2018 and the first through third quarter of 2019 for delivery in 2020.<sup>9</sup>
- The Final RPS Adder was calculated using the volume weighted average of all IOU, CCA, and ESP market transactions using only PCC 1 index-plus contracts executed in year 2018 and the first through third quarter of 2019 for delivery in year 2019.

### **Energy Index**

Energy Index is the Market Price Benchmark that reflects the estimated market value of each unit of energy in a utility portfolio, in dollar value per megawatt hour (\$/MWh). The Energy Index was previously referred to as “Brown Power Index,” adder or benchmark.<sup>10</sup>

- The Energy Index was calculated using Platts-ICE Forward Curve-Electricity market data from the period of October 1 through October 31 for on peak and off-peak power prices for 2020 NP15 and SP15. The 2020 monthly average of on peak and off-peak market value per megawatt for the NP15 and SP15 were determined and used to calculate the 2020 average price per megawatt hour. Using these averages, the IOUs will calculate the final Energy Index to be used in the 2020 Forecasted ERRA Proceeding.
- There is no Energy Index used in the true up process. Revenue is trued up for year 2019 based on the realized net CAISO revenues for all PCIA-eligible resources, including revenues received through CAISO’s Capacity Procurement Mechanism (CPM), if any. The realized revenues are recorded to the vintaged resources’ respective vintaged Portfolio Allocation Balancing Account (PABA) subaccount and become an offset to the actual costs recorded in those subaccounts. The year-end over- or under-collection in the vintaged PABA subaccounts for 2019 are included in the vintaged PCIA rate calculation for 2020. The true up process is addressed as part of the annual ERRA Forecast proceeding.

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<sup>7</sup> D.11-12-052 defines PCC1 as Facilities with First Point of Interconnection within a California Balancing Authority (CBA) or with Generation Scheduled into a CBA

<sup>8</sup> Index -plus refers to contracts for the market index price of energy plus a REC bid premium

<sup>9</sup> D.19-10-001 at 7

<sup>10</sup> D.19-10-001 at 7