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

November 1, 2021

Pursuant to Decision (D) 19-10-001, Energy Division issues the following values for the Power Charge Indifference Adjustment (PCIA) Forecast and True Up to be used as inputs in utilities 2021 Energy Resource Recovery Account (ERRA) Forecast Updates in early November 2021. The PCIA includes the Market Price Benchmarks of the Renewable Portfolio Standard (RPS) Adder, and the Resource Adequacy (RA) Adders and Energy Index, as defined in the decision.¹ 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.

2021 Final Adders							
		PG&E	SCE	SDG&E			
RA Adder	System RA	\$7.33					
	Local RA	\$6.31	\$6.46	\$5.93			
	Flexible RA	\$5.39					
RPS Adder		\$14.23					

Table 1. Market Price Benchmarks Used in PCIA

2022 Forecast Adders							
		PG&E	SCE	SDG&E			
Energy Index ²	On-Peak	\$72.96	\$71.72	\$71.72			
	Off-Peak	\$58.34	\$56.53	\$56.53			
RA Adder	System RA	\$6.03					
	Local RA	\$6.35	\$6.46	\$6.36			
	Flexible RA	\$6.41					
RPS Adder		\$13.70					

Market Price Benchmarks

¹ D.19-10-001 at 7

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

The calculation of the PCIA was established in D.11-12-018 and has most recently been refined in D.19-10-001.³ The PCIA, or a utilities' Indifference Amount, is equivalent to a utility's total portfolio costs less its market value in a given year. 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 (MPB) 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)."⁴ MPBs are multiplied by the relevant portfolio volume as part of the overall calculation of market value. The forecasted adders are mechanisms intended to reduce uncertainty of the indifference amount, and the true up adders are mechanisms intended to further align actual realized market revenues with forecasted values.

RA Adder

The RA Adder is the MPB 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.⁵

- <u>The Forecast RA Adder</u> 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 2020, and the first through third quarter of 2021 for delivery in 2022. 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 2022 and beyond.⁶
- <u>The Final RA Adder</u> for system, flexible, and local is calculated using the volume-weighted average of all IOU, CCA, and ESP RA-only market transactions executed in 2020 and first through third quarter of 2021 for delivery in 2021.

³ 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.

⁴D.19-10-001 at 6

⁵ D.19-10-001 at 7

⁶ D.19-10-001, Attachment A, at 1-2

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. Both the forecast and the final adder are based on transactions of bundled renewable energy credits (RECs) of the portfolio content Category 1 (PCC1)⁷, Short-Term contracts, and ⁸ transactions.

- <u>The Forecast RPS Adder</u> was calculated using the volume weighted average of all IOU, CCA, and ESP market transactions using PCC-1 index-plus contracts executed in the fourth quarter of 2020 and the first through third quarter of 2021 for delivery in 2022.⁹
- <u>The Final RPS Adder</u> was calculated using the volume weighted average of all IOU, CCA, and ESP market transactions using only PCC-1 index-plus contracts executed in the fourth quarter of the year 2020 and the first through third quarter of 2021 for delivery in year 2021.

Energy Index

Energy Index is the MPB 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.¹⁰

• <u>The Energy Index</u> 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 2022 NP15 and SP15. The 2022 monthly average of on peak and off-peak market value per megawatt for the NP15 and SP15 were determined and used to calculate the 2022 average price per megawatt hour. Using these averages, the IOUs will calculate the final Energy Index to be used in the 2022 Forecasted ERRA Proceeding.

⁷ 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

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

⁹ D.19-10-001 at 7

¹⁰ D.19-10-001 at 7