Additional Information Supporting Southern California Edison Company's (SCE) Presentation on its Proposed Approach to Determine Cost Refunds to Eligible Community Choice Aggregation (CCA) and Direct Access (DA) Customers

Introduction

This document is intended to provide additional information regarding SCE's proposed bill credit process, building on SCE's DA/CCA Bill Credit presentation served on March 26, 2018. The presentation is intended for use at a California Public Utilities Commission (Commission) workshop to discuss proposals from SCE, Pacific Gas and Electric Company, and San Diego Gas & Electric Company (jointly, the investor-owned utilities, or IOUs). The presentation and this additional information reflect SCE's thinking on how to determine and process the bill credit for DA or CCA customers once their ESP or CCA has implemented a DR program similar to an SCE DR program. DA and CCA providers are referred to herein as Competing Providers.

Additional Information for Slide 3

In the presentation, SCE proposed a new tariff, the Competing Provider Demand Response Credit (CP-DRC) that is modeled after SCE's existing Direct Access Revenue Cycle Services rate (Schedule DA-RCSC). This rate will provide a monthly offset to eligible customer bills that will begin one month after the end of the 365-day implementation period. The implementation period begins upon Commission approval of an advice letter from the Competing Provider informing the Commission that it has implemented a DR program similar to an IOU program. The monthly credit will round off at the 5^{th} decimal place, so if the rounded credit results in a zero value in the 5^{th} decimal place, an alternative method may need to be considered. The formula for the credit for each rate group is: CP-DRC_{RG} Offset = (DR Program Costs x Rate Group Allocation %) / Rate Group Sales.

Additional Information for Slide 4

The CP-DRC tariff will have four sets of credits corresponding to the Base Interruptible Program (BIP), Agricultural & Pumping Interruptible (API), Summer Discount Program (SDP), and Capacity Bidding Program (CBP). These unique credits will reflect the value of the DR program incentives for each respective program, and the proportional share of each DR program's administration, marketing, and measurement and evaluation costs. These credits will be applied to the delivery portion of the Competing Provider customer's bill on a monthly basis to offset DR program costs embedded in the delivery charges. One or more program credits can be applied to a customer bill depending on the Competing Provider's DR program offerings. The CP-DRC credits will be updated on an annual basis as part of SCE's annual consolidated Energy Resource Recovery Account (ERRA) rate changes, which are generally scheduled to implement on January 1 of each year.

The CP-DRC tariff will be applicable to all of SCE's DA and CCA customers whose Competing Provider provides DR programs deemed to be similar to an SCE DR program or programs. The new tariff will specify the rules governing the application of DR credits, as well as a schedule of credit factors specific to each customer rate group for each DR program where SCE currently collects interruptible surcharges to pay for program incentives (i.e., BIP, API, and SDP), and distribution revenues to pay for program marketing and administration, and CBP incentives.

SCE currently collects DR program incentive related costs for the BIP, AP-I, and SDP interruptible programs through rate group specific interruptible surcharges embedded in SCE's distribution energy charges. The total authorized incentive amounts for BIP, API, and SDP are allocated on the basis of

system generation revenues to each of SCE's customer rate groups. DR program administration costs are embedded in the base distribution rates. All CBP costs are embedded in the base distribution revenue requirement.

The CP-DRC credits will offset the incentive and administrative costs of affected programs for customers of each Competing Provider offering a similar DR program. This will be done by first allocating each DR program's authorized incentive and program administration budgets to each customer rate group using SCE's General Rate Case (GRC) Phase 2 approved allocators for system generation or base distribution, depending on the cost element. SCE will then calculate a rate group specific \$/kWh credit by dividing said allocated costs with the respective forecasted customer rate group kWh sales.

The overall credit will be identified with a flag in SCE's billing system that relates to a particular Competitive Provider and corresponds to the four previously mentioned DR programs. For each DA-CCA customer, the flags will determine whether any or all of the four DA-CCA DR credits will be applicable during each billing cycle.

Additional Information for Slides 6 and 7

SCE's presentation included two illustrative tables showing how the CP-DRC for BIP and CBP will be applied to each rate group using 2018 approved allocation factors and forecasted kWh per rate class. These allocation factors and forecasted kWh by rate class and allocated DR program and incentive costs vary by year, so the CP-DRC offsets should not be expected to remain the same each year. CARE and FERA customers will receive the same CP-DRC rate levels as non-CARE and non-FERA customers. Although the Joint Proposal filed January 30th indicated that credits for CARE and FERA customers would be discounted to reflect the CARE and FERA rate discounts, after further evaluation, SCE does not currently plan to discount the bill credits for CARE or FERA customers.

To calculate the CP-DRC BIP offset credit for Competing Providers' residential customers, SCE will first multiply the BIP incentive costs by the effective DR incentive surcharges allocator, which is currently 37.13% for residential rate group. (The rate allocator was determined in SCE's 2018 ERRA consolidated filing rate design model. Note that these rate allocators can change whenever SCE has a General Rate Case (GRC) or ERRA filing.) This product will be added to the product of the BIP administration costs and the effective base distribution allocator, which is currently 49.83% for the residential rate group. In D.17-12-003, *Decision Adopting Demand Response Activities and Budgets for 2018 through 2022*, the Commission authorized SCE to collect \$71,973,000 for BIP incentives and \$312,000 for BIP administration costs for 2018. (See Attachment 3 of D.17-12-003). The sum of residential rate group allocated BIP incentive and administration cost responsibility would therefore be as follows:

2018 BIP		2018 ERRA DR		2018 BIP		2018 base			
Incentives		incentives		admin		distribution			
		surcharges allocator		costs		allocator for			
		for residential rate				residential rate			
		group				group			
\$71,973,000	*	37.13%	+	\$312,000	*	49.83%	=	\$26,882,576	

This value of \$26,879,045 for 2018 would then be divided by forecasted SCE 2018 total residential rate group sales of 27,027,890 MWh to arrive at a CP-DRC BIP offset credit factor:

• \$26,882,576 / 27,027,890 MWh = (\$0.00099) per kWh.

A sample residential customer with an assumed monthly billed usage of 500 kWh will receive a CP-DRC offset of 50 cents per month as shown below:

500 kWh * (\$0.00099) / kWh = \$0.50 (rounded up from \$0.495)

The following picture shows this calculation:

Sample Calculation – BIP

Rate Group	DR Program Incentive	Base Distribution Allocator	Forecasted kWh	"	llocated DR Program & ntive Costs (\$)	CP-DRC Rate (\$/kWh)		
	(A)	(B)	(C)	(F)=	(A)*(D)+(B)*(E)	(G)=(F)/(C)		
Residential	37.13%	49.83%	27,027,890,316	\$	26,882,576	\$	0.00099	
GS-1	7.38%	7.92%	6,031,751,392	\$	5,333,230	\$	0.00088	
TC-1	0.06%	0.12%	58,356,002	\$	44,229	\$	0.00076	
GS-2	17.04%	17.53%	13,411,719,867	\$	12,322,464	\$	0.00092	
TOU-GS-3	9.73%	8.03%	8,047,378,545	\$	7,027,943	\$	0.00087	
LSMP	34.21%	33.60%	27,549,205,806	\$	24,727,865	\$	0.00090	
TOU-8-Sec	9.45%	6.98%	8,235,401,547	s	6,821,816	\$	0.00083	
TOU-8-Pri	6.07%	4.11%	5,631,492,598	\$	4,384,341	\$	0.00078	
TOU-8-Sub	5.95%	0.97%	6,052,758,430	\$	4,282,604	\$	0.00071	
TOU-8-S-SEC	0.25%	0.19%	227,776,827	\$	183,025	\$	0.00080	
TOU-8-S-PRI	0.83%	0.68%	783,709,892	\$	602,723	\$	0.00077	
TOU-8-S-SUB	2.11%	0.38%	2,179,020,190	\$	1,520,309	\$	0.00070	
Large Power	24.67%	13.31%	23,110,159,485	\$	17,794,818	\$	0.00077	
TOU-PA-2	2.05%	1.94%	1,863,851,287	s	1,480,530	\$	0.00079	
TOU-PA-3	1.46%	1.16%	1,452,767,588	\$	1,052,334	\$	0.00072	
Ag & Pumping	3.51%	3.10%	3,316,618,874	\$	2,532,864	\$	0.00076	
St. Lighting	0.48%	0.18%	700,449,891	\$	346,877	\$	0.00050	
Total	100.00%	100.00%	135,680,308,538	s	72,285,000	\$	0.00053	

BIP Incentive	BIP Admin Cost
(D)	(E)
\$ 71,973,000	\$ 312,000
TOTAL:	\$ 72,285,000

A sample residential customer with an assumed monthly billed usage of 500 kWh will receive a CP-DRC offset of 50 cents per month as shown below:

500 kWh * (\$0.00099) / kWh = \$0.50 (rounded up from \$0.495)

The CP-DRC CBP offset credit for Competing Providers' residential customers will be calculated as the sum of the CBP incentive costs and the CBP administration costs multiplied by the effective base distribution allocator, which is currently 49.83% for residential rate group. In D.17-12-003, the Commission authorized SCE to collect \$2,789,000 for CBP incentives and \$201,000 for CBP administration costs for 2018. The sum of residential rate group allocated CBP incentive and administration cost responsibility would therefore be as follows:

2018 CBP		2018 ERRA DR		2018 CBP		2018 base		
Incentives		incentives		admin		distribution		
		surcharges allocator		costs		allocator for		
		for residential rate				residential rate		
		group				group		
\$2,789,000	*	49.83%	+	\$201,000	*	49.83%	Ш	\$1,489,812

This value of \$1,489,812 for 2018 would then be divided by forecasted SCE 2018 total residential rate group sales of 27,027,890 MWh to arrive at a CP-DRC CBP offset credit factor:

• \$1,135,714 / 27,027,890 MWh = (\$0.00006) per kWh.

A sample residential customer with an assumed monthly billed usage of 500 kWh will receive a CP-DRC offset of 3 cents per month as shown below:

• 500 kWh * (\$0.00006) / kWh = \$0.03

The following picture shows this calculation:

Sample Calculation – CBP

Rate Group	Base Distribution Allocator	Base Distribution Allocator	Forecasted kWh	Allocated DR Program & Incentive Costs (\$) (F)=(A)*(D)+(B)*(E)		CP-DRC Rate (\$/kWh) (G)=(F)/(C)		
	(A)	(B)	(C)					
Residential	49.83%	49.83%	27,027,890,316	\$	1,489,812	\$	0.00006	
GS-1	7.92%	7.92%	6,031,751,392	\$	236,806	\$	0.00004	
TC-1	0.12%	0.12%	58,356,002	5	3,562	5	0.00006	
GS-2	17.53%	17.53%	13,411,719,867	\$	524,002	\$	0.00004	
TOU-GS-3	8.03%	8.03%	8,047,378,545	5	240,128	\$	0.00003	
LSMP	33.60%	33.60%	27,549,205,806	\$	1,004,498	\$	0.00004	
TOU-8-Sec	6.98%	6.98%	8,235,401,547	\$	208,721	\$	0.00003	
TOU-8-Pri	4.11%	4.11%	5,631,492,598	5	122,805	\$	0.00002	
TOU-8-Sub	0.97%	0.97%	6,052,758,430	5	29,147	5		
TOU-8-S-SEC	0.19%	0.19%	227,776,827	S	5,551	\$	0.00002	
TOU-8-S-PRI	0.68%	0.68%	783,709,892	S	20,191	\$	0.00003	
TOU-8-S-SUB	0.38%	0.38%	2,179,020,190	\$	11,456	\$	0.00001	
Large Power	13.31%	13.31%	23,110,159,485	s	397,871	\$	0.00002	
TOU-PA-2	1.94%	1.94%	1,863,851,287	\$	57,901	\$	0.00003	
TOU-PA-3	1.16%	1.16%	1,452,767,588	S	34,651	\$	0.00002	
Ag & Pumping	3.10%	3.10%	3,316,618,874	\$	92,552	\$	0.00003	
St. Lighting	0.18%	0.18%	700,449,891	s	5,266	\$	0.00001	
Total	100.00%	100.00%	135,680,308,538	5	2,990,000	s	0.00002	

1	CBP Incentive	P Program dmin Cost
	(D)	(E)
\$	2,789,000	\$ 201,000
	TOTAL:	\$ 2,990,000

A sample residential customer with an assumed monthly billed usage of 500 kWh will receive a CP-DRC offset of 3 cents per month as shown below:

500 kWh * (\$0.00006) / kWh = \$0.03

0.00003

Again, these sample calculations provide sample bill credits for residential customers.