#### **BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking to Oversee the Resource Adequacy Program, Consider Program Refinements, and Establish Forward Resource Adequacy Procurement Obligations.

Rulemaking 19-11-009 (Filed November 7, 2019)

#### COMMENTS ON JOINT COMPLIANCE FILING ON REFRESHED EFFECTIVE LOAD CARRYING CAPABILITY STUDY RESULTS OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

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Date: July 19, 2021

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On July 1, 2021, the California Independent System Operator Corporation (CAISO), Pacific Gas and Electric Company, Southern California Edison, and San Diego Gas & Electric Company filed a Joint Compliance Filing on Refreshed Effective Load Carrying Capability Study Results (Joint Compliance Filing). On July 9, 2021, Administrative Law Judge Chiv issued an email ruling seeking comments on the Joint Compliance Filing. The CAISO previously provided comments concurrent with the Joint Compliance Filing. As a result, the CAISO resubmits those comments here as Attachment A.

Respectfully submitted

#### <u>By: /s/ Jordan Pinjuv</u>

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Date: July 19, 2021

Attachment A



## Stakeholder Comments Template

# Effective Load Carrying Capability (ELCC) Study Results for Demand Response (DR) Resources

This template has been created for submission of stakeholder comments on the updated ELCC study results for DR resources, which was published on June 18, 2021 The Stakeholder meeting presentation and other information related to the discussion, may be found on the initiative webpage at:

http://www.caiso.com/informed/Pages/MeetingsEvents/MiscellaneousStakeholderMeetings/Default.aspx.

Upon completion of this template, please submit it to <u>initiativecomments@caiso.com</u>. Submissions are requested by close of business on **June 28, 2021.** 

Submitted by	Organization	Date Submitted
Delphine Hou	CAISO	June 28, 2021

# Please provide your organization's comments on the following issues and questions.

## 1. ELCC Updated Study Results

Please provide your organization's feedback on the updated ELCC study results for DR resources.

#### I. Introduction

The California Independent System Operator Corporation (CAISO) provides the following comments on the refreshed study results from Energy and Environmental Economics, Inc. (E3). The study was conducted in compliance with the California Public Utilities Commission (Commission) *Assigned Commissioner's Ruling on Submission of Refreshed Effective Load Carrying Capability Study Results* (Ruling). The Ruling requested that the CAISO, Pacific Gas & Electric (PG&E), Southern California Edison (SCE), and San Diego Gas & Electric (SDG&E) were requested to submit all compliance materials by July 1, 2021 in order to allow the Commission time to finalize investor-owned utility (IOU) qualifying capacity (QC) values. The

Ruling specifies the following conditions: (1) the effective load carrying capability (ELCC)determined QC would only be applicable for the 2022 compliance year, and would only apply to investor-owned utility (IOU) demand response programs (not to third-party demand response); (2) potential adoption for 2022 does not indicate Commission preference for ELCC or any other QC methodology; and (3) adoption of any ELCC-determined QC for 2022 must occur in early September 2021 to allow sufficient time for final resource adequacy allocations in mid-September 2021.<sup>1</sup>

The refreshed study results finds that the ELCC values reflect in aggregate a derate from the QC values calculated today based on the load impact protocol (LIP) methodology. The refreshed study results also found that based on individual demand response programs, the ELCC values can reflect either a derate or uprate and vary widely across programs. The study results were presented in two different levels of aggregation: (1) by IOU by month, representing the value of each IOU's portfolio in aggregate and (2) by program by IOU by month, representing the value of each program by local capacity area. The ELCC percentages only apply to the summer months from June through September so all other months should continue to use the LIP-derived QC values for IOU demand response in the 2022 resource adequacy program. The CAISO strongly supports the results of the study and urges the Commission to adopt them for use as described in the Ruling. Based on the CAISO's understanding, the Commission may choose to apply the percentage derate or uprate from either level of aggregation to determine the QC value. The CAISO recommends the Commission use aggregated derates by IOU for ease of implementation as this effort is limited to the 2022 resource adequacy year and for better accuracy. If the Commission uses the aggregate derate values by IOU by month, the IOUs should be provided the flexibility to determine how to fairly and cost-effectively allocate the derate amongst their different programs.

#### II. Discussion

The CAISO provides comments recommending the Commission use the E3 Refresh Study Results for IOU demand response programs in the 2022 resource adequacy year, a discussion on the validity of the study methodology and assumptions, adherence to the expedited process as

<sup>&</sup>lt;sup>1</sup> Ruling, pp. 3-4.

directed by the Ruling, and additional clarifications on the application of adders via crediting. The CAISO provides an illustrative example of how the ELCC percentages can be applied to the existing LIP-based NQC values in appendix A.

#### A. The Commission Should Use the E3 Refresh Study Results for IOU Demand Response Programs in the 2022 Resource Adequacy Year.

In compliance with the Ruling, the CAISO contracted with Energy and Environmental Economics, Inc. (E3) to refresh its IOU demand response ELCC study using 2020 demand response program bid data from PG&E, SCE, and SDG&E (E3 Refresh Study Results). The data provided reflect demand response ELCC values without planning reserve margin (PRM) or transmission and distribution loss adders. The PRM and adders are discussed in more detail in Section III below. The results reflect two levels of aggregation: (1) by IOU by month, representing the value of each IOU's aggregated demand response portfolio<sup>2</sup> and (2) by program by IOU by month, representing the value of each IOU demand response program by local capacity area (LCA).<sup>3</sup> To provide an example, Table A below shows the refreshed ELCC percentage derates for August 2020 by IOU. This percentage is based on the 2020 annual ELCC values calculated by IOU compared to the net qualifying capacity (NQC) values used by the Commission to set the credited IOU demand response resource adequacy amounts for 2020. The 2020 annual ELCC values are then calculated as a percentage of the summer NQC values for June through September (only August is shown below in this example). The table shows that the August 2020 ELCC values for the PG&E, SCE, and SDG&E demand response programs are 82%, 79%, and 54%, respectively, of the 2020 LIP-derived NQC values (all derates).<sup>4</sup>

-		
		2020 ELCC as a % of NQC for 2020*
	[A]	[G]
	IOU	Aug
	PG&E	82%
	SCE	79%
	SDG&E	54%

#### Table A: Sample 2020 ELCC Derate Values by IOU For August 2020

\*Does not include planning reserve margin, distribution, and transmission line loss adders.

<sup>&</sup>lt;sup>2</sup> Energy and Environmental Economics, Inc. (E3), "Demand Response ELCC", June 24, 2021, p. 51. (E3 Refresh Study Results.) Available at: <u>http://www.caiso.com/Documents/E3-CAISODemandResponseELCCStudyUpdate2021-Combined-.pdf</u>

<sup>&</sup>lt;sup>3</sup> E3 Refresh Study Results, pp. 52-54.

<sup>&</sup>lt;sup>4</sup> E3 Refresh Study Results, p. 51.

On the other hand, viewing the results by specific demand response program shows significant variations between programs. For example, individual PG&E demand response programs have August 2020 ELCC values ranging from 0% to 462% of 2020 LIP values.<sup>5</sup> ELCC values at the demand response program level reflect both derates and uprates from the existing LIP values.

The CAISO believes the Commission may apply the percentage derate or uprate to LIP values at the IOU level or the program level to determine 2022 IOU demand response QC values. However, the CAISO recommends using the IOU level aggregation. Although aggregation by program type by IOU by month provides valuable insight into performance variation across the different programs, these more granular results are affected by the inherent "noise" caused by using only one year of bidding data. Furthermore, the E3 Refresh Study Results did not have visibility into customer enrollments, or potential data misalignment issues that would need to be sorted out for a handful of programs requiring greater understanding of the development of program specific bid data. This is partially why the CAISO prefers the IOU-level aggregation over program specific derates or uprates. Additionally, the large variation in results, with some programs receiving a large derate and others a large uprate, could be difficult to implement. Furthermore, use of the aggregated derates by IOU allows the IOUs themselves to determine how to fairly and cost-effectively allocate the derate amongst their different programs.

The ELCC percentages only apply to the summer months so all other months should continue to use the LIP-derived QC values for IOU demand response in the 2022 resource adequacy program. The Commission may choose to apply the percentage derate or uprate from either level of aggregation to determine the QC value. If the Commission uses the aggregate derate values by IOU by month, the IOUs should be provided the flexibility to determine how to fairly and cost-effectively allocate the derate amongst their different programs. The CAISO recommends the Commission use aggregated derates by IOU for ease of implementation as this effort is limited to the 2022 resource adequacy year and for better accuracy.

To assist the Commission in implementation given the compressed schedule, Appendix A provides an illustrative example of how the two sets of 2020 ELCC percentages applied to the

<sup>&</sup>lt;sup>5</sup> E3 Refresh Study Results, p. 52.

demand response allocation values used to develop the resource adequacy IOU credits provided to the CAISO.<sup>6</sup>

#### B. The ELCC Study Methodology and Assumptions Are Sound.

The ELCC study methodology and assumptions are thoroughly documented in the E3 analysis and have not changed since first introduced in 2020.<sup>7</sup> In keeping with the methodology used in prior iterations of the E3 ELCC study, data from LIP filings were not an input into the model used to generate ELCC MW values and thus were not used to determine the ELCC study results. However, the E3 Refresh Study Results use 2020 demand response NQC values, which are informed by LIP filings, to compare with the ELCC results and to calculate ELCC as a percentage of the June through September 2020 NQC values. Importantly, the ELCC analysis is based on how demand response resources were bid into the market and is not based on its performance to those bids. Therefore, this does not result in a "double penalty" (once for bids below the NQC value and another for performaning below bid amounts if awarded). To the extent that ELCC is lower than NQC, than NQC is overstating the ability of these resources and should be adjusted to reflect the actual capability represented in the bids.

As explained in the E3 Refresh Study Results, there are three approaches to measuring resource ELCC value: (1) portfolio, (2) first-in, and (3) last-in.<sup>8</sup> The E3 ELCC study uses the first-in methodology to determine demand response ELCC value because it measures the ability of a resource to serve load at the peak, *i.e.*, to "clip the peak." This approach is analogous to how industry participants anticipate peaking resources will be utilized.<sup>9</sup> The "last-in" methodology is completely unrelated from Commission preference for preferred resources such as energy efficiency, demand response, etc. "Last-in" simply refers to how these resources are dispatched and if they are optimally dispatched in conjunction with all other resources on the system. Demand response today does dispatch after natural gas. Natural gas is dispatched every day in California, whereas demand response is only dispatched for a limited number of hours per year during times when the system is constrained. This dispatch is entirely unrelated to Commission preference. These concepts should not be tied together in any way.

<sup>&</sup>lt;sup>6</sup> 2021-2023 PG&E, SCE, and SG&E Demand Response Totals. Available at: <u>https://www.cpuc.ca.gov/General.aspx?id=6311</u>

<sup>&</sup>lt;sup>7</sup> E3 Refresh Study Results, pp. 10-15 and pp. 18-21.

<sup>&</sup>lt;sup>8</sup> E3 Refresh Study Results, p. 13.

<sup>&</sup>lt;sup>9</sup> E3 Refresh Study Results, p. 14.

More generally, the methodology has been thoroughly vetted and leverages E3's Renewable Energy Capacity Planning (RECAP) model. RECAP is used by many utilities and government agencies to assess generation resource adequacy for a power system based on loss-ofload probability analysis. RECAP simulates the availability of bulk power system energy and capacity to serve load under a wide range of weather conditions over thousands of years selected through Monte Carlo analysis. RECAP calculates reliability statistics including loss of load probability (LOLP), loss of load expectation (LOLE), expected unserved energy (EUE) and ELCC through time-sequential simulations of available electric resources. RECAP also calculates the planning reserve margin (PRM) that would be necessary to meet a selected reliability standard such as 1-day-in-10-years. RECAP is specifically calibrated to analyze resource adequacy challenges under high renewable penetration. RECAP estimates ELCC values for both conventional and dispatch-limited resources such as wind, solar, hydro, demand response, and energy storage. Hourly data for electric loads, wind production, solar production and hydro availability are developed for many years of historical weather data and serve as an input to RECAP. The model considers both the absolute levels of demand and supply and the correlation of wind and solar output with load and with each other to ensure that the diversity of supply resources is fully considered.

E3 relied on public vetted data or direct inputs for the refresh analysis. Specifically, the study used the Commission's integrated resource plan portfolio for the 2021-2022 Transmission Planning Process.<sup>10</sup> 2020 bid data was provided directly by each IOU for each program.

## C. The Ruling Calls for an Expedited Process Limited to 2022 Resource Adequacy Year.

The CAISO appreciates the Commission providing an opportunity to file documentation per the Ruling. The CAISO also understands that given the short turn-around and the limited scope of the Ruling, the intent was not to revise the current E3 methodology but simply to refresh the prior study using 2020 bid data. From the CAISO's understanding, E3 had been in regular communication with all three IOUs since since December 2020 to discuss the ELCC methodology, assumptions, and results. CAISO and E3 attended meetings with and addressed data requests from the IOUs to discuss these topics on multiple occasions and answer general and specific ELCC

<sup>&</sup>lt;sup>10</sup> E3 Refresh Study Results, p. 45.

methodology questions and questions related specifically to the E3 Refresh Study Results. Furthermore, the outreach process adhered to the requirements and timelines specified in the Ruling.

#### III. Additional Clarifications

The CAISO provides an additional clarification about the application of adders via crediting. As noted above, the values provided in the ELCC study refresh do not include any PRM gross ups or adders for distribution and transmission loss factors. Decision (D.) 21-06-029 retains a 9% PRM adder and the distribution and transmission loss factor adders. Specifically, for the transmission loss factor, D.21-06-029 directs Energy Division staff to continue to use crediting to account for this adder.<sup>11</sup> However, much of the impetus to use ELCC values for 2022 is to eliminate non-net-neutral crediting. If the CAISO determines PRR 1280 is no longer held in abeyance, the CAISO will no longer accept non-net-neutral credits for resource adequacy purposes. However, the Commission can reflect the 9% of the PRM and the transmission loss factors to the ELCC values established by the refresh study and set the total value as the QC value. The QC value would not be subject to the application of the resource adequacy availability incentive mechanism (RAAIM) if a waiver request is granted by the Federal Energy Regulatory Commission.

## Additional comments

Please offer any additional feedback your organization would like to provide on the updated study results and meeting discussion.

The CAISO provides the following illustrative applications of the ELCC values in Appendix A.

<sup>&</sup>lt;sup>11</sup> D.21-06-029, p. 43.

### Appendix A: Illustrative ELCC Values for 2022 IOU Demand Response

The CAISO provides a illustrative examples of how the ELCC percentages can be applied to the existing LIP-based NQC values to assist Commission Energy Division staff. The examples are provided as pairs for each IOU showing: (1) how the ELCC percentages may be applied at the aggregated IOU level by month from June through September and (2) how the ELCC percentages may be applied at the program level by month from June through September. The CAISO used the 2020 ELCC values provided by E3 and applied them to the values the CAISO believed were used to establish the IOU demand response credits used to reduce the resource adequacy requirement. The latest vintage available are the spreadsheets posted to the Commission resource adequacy website for the 2021-2023 PG&E, SCE, and SG&E Demand Response Totals.<sup>12</sup> The examples below use the 2022 data set provided.

The CAISO's illustrative examples are provided in the excel workbook is posted at: <a href="http://www.caiso.com/Pages/documentsbygroup.aspx?GroupID=19CB4F49-2CB5-47A8-B646-912C3FE8E448">http://www.caiso.com/Pages/documentsbygroup.aspx?GroupID=19CB4F49-2CB5-47A8-B646-912C3FE8E448</a>

Each tab of the workbook is also copied into this appendix.

Tab: "ReadMe"

ppendix A - Illustrative ELCC V	alues for 2022 IOU Demand Response
Table of Contents	Description
ELCC Results	Shows results of ELCC refresh, both in MW and in comparison to 2020 NQC DR Allocations for June - September.
PG&E IOU ELCC Derate	Example of IOU-level derate. Shows PG&E 2022 DR Allocations (from 2019 LIP) scaled by PG&E aggregate ELCC result.
PG&E Program ELCC Derate	Example of program-level derate. Shows PG&E 2022 DR Allocations (from 2019 LIP) scaled by program-LCA-level ELCC results using August 2020 ELCC %.
SCE IOU ELCC Derate	Example of IOU-level derate. Shows SCE 2022 DR Allocations (from 2019 LIP) scaled by SCE's aggregate ELCC result.
SCE Program ELCC Derate	Example of program-level derate. Shows SCE 2022 DR Allocations (from 2019 LIP) scaled by program-LCA-level ELCC results using August 2020 ELCC %.
SDG&E IOU ELCC Derate	Example of IOU-level derate. Shows SDG&E 2022 DR Allocations (from 2019 LIP) scaled by SDG&E aggregate ELCC result.
SDG&E Program ELCC Derate	Example of program-level derate. Shows SDG&E 2022 DR Allocations (from 2019 LIP) scaled by program-LCA-level ELCC results .

<sup>&</sup>lt;sup>12</sup> Available at: <u>https://www.cpuc.ca.gov/General.aspx?id=6311</u>

## Tab: "ELCC Results"

Source: E	3			are discussed in E3	s "Demand Response I om/Documents/E3-CA	LCC" study results or	g. Alternative baselines 1 page 48. Available at: ELCCStudyUpdate2021-					
IOU	Program	Local Capacity Area (LCA)	ELCC, First-in 2020 (MW)	2020 NQC June (MW)	2020 NQC July (MW)	2020 NQC August (MW)	2020 NQC September (MW)	ELCC as % of NQC June 2020	ELCC as % of NQC July 2020	ELCC as % of NQC August 2020	ELCC as % of NQC September 2020	E3 Notes
	All programs		1035.85	1249.42	1255.94	1306.25	1247.82	83%	82%	79%		The Aggregate ELCC for all IOUs could be slightly different than sum of each IOU's ELCC. This is owing to interaction between the different IOUs programs being captured in the former but not the latter
PG&E												The Aggregate ELCC could be slightly different than sum of each program's ELCC. This is owing to interaction between programs being captured in the aggregate number but not the program
	All programs	All LCAs	273.39	348.84	342.43	335.40	317.91	78%	80%	82%	86%	specific number
	BIP	All LCAs	200.80	265.98	257.10	253.30	241.80	75%	78%	79%		
	CBP	Bay Area	9.03	10.00	10.00	10.00	10.00	90%	90%	90%		
	1	CAISO System	9.81	3.00		3.00	3.00	327%	327%	327%		
		Greater Fresno	9.83	9.00	9.00	9.00	9.00	109%	109%	109%	109%	
		Humboldt	1.10	0.00	0.00	0.00	0.00	0%	0%	0%	0%	NQC not disclosed to E3 due to small number of participants
		Kern North Coast	5.53			3.00	3.00	184% 462%	184% 462%	184%		
		Sierra	4.62			5.00		462%		462%		
		Sierra	1.50	5.00	5.00	5.00	5.00	40%	40%	40%	40%	NQC not disclosed to E3 due to small number or
		Stockton	1.39	0.00	0.00	0.00	0.00	0%	0%	0%	0%	participants
	SAC	Bay Area	7.47	16.00	17.00	16.00	15.00	47%	44%	47%		p p
		CAISO System	5.62	10.00	11.00	10.00	9.00	56%	51%	56%	62%	
		Greater Fresno	3.34			9.00				37%		
												NQC not disclosed to E3 due to small number o
		Kern	2.54	0.00	0.00	0.00	0.00	0%	0%	0%	6 <b>0%</b>	participants
		North Coast	0.46			2.00		23%		23%		
		Sierra	6.16			9.00	7.00	68%	68%	68%		
SCE	All programs	Stockton	3.19	5.00	5.00	5.00	4.00	64%	64%	64%	80%	The Aggregate ELCC could be slightly different than sum of each program's ELCC. This is owing to interaction between programs being capture- in the aggregate number but not the program specific number
	API	Big Creek	29.52			29.57		98%		100%		specific number
	~	CAISO System	2.10		2.66	2.62		80%	79%	80%		
	1	LA Basin	3.82	5.22		6.44		73%	63%	59%		
	BIP	Big Creek	44.86	71.12	68.63	68.87	74.42	63%	65%	65%		
		CAISO System	118.71	101.88	94.16	91.75	97.34	117%	126%	129%	122%	
		LA Basin	329.20	438.99	421.92	441.58	431.19	75%	78%	75%		
	CBP	Big Creek	0.39	Redacted	Redacted	Redacted	Redacted	15%	15%	15%		
		CAISO System	0.20	Redacted	Redacted	Redacted	Redacted	30%	30%	30%		
		LA Basin	4.57	Redacted	Redacted	Redacted	Redacted	54%	54%	54%		
	SDP	Big Creek	12.95	18.66	24.40 11.83	26.12	18.60	69% 110%	55% 71%	51%		
		CAISO System LA Basin	9.24	8.37		11.64	8.96	110%	/1%	72%		
	SEP	Big Creek	2.95			7.84		49%	46%	38%		
		CAISO System	0.56			1.01		60%	56%	56%		
		LA Basin	15.01	29.68		39.97	36.68	51%	47%	38%		
	LCR	LA Basin	63.82	75.00	75.00	75.00	80.00	85%	85%	85%	80%	
DGE												The Aggregate ELCC could be slightly different than sum of each program's ELCC. This is owing to interaction between programs being capture- in the aggregate number but not the program
	All man	SDGE	7.46	8.472	11.858	13.737	15.088	88%	63% 55%	54% 49%	49%	specific number
	All programs											
	AC Saver DA	SDGE	2.58			5.25						
	AC Saver DA AC Saver DO	SDGE SDGE	1.90	0.60	3.25	4.56	5.49	314%	58%	42%	35%	
	AC Saver DA	SDGE		0.60	3.25 1.01		5.49 1.10				35% 62%	

# Tab: "PG&E IOU ELCC Derate" (1 of 2)

These are the original spreadsheets from the Resource Adequacy Compliance Mate The IOU-level ELCC values (columns C-F, linked from ELCC Results tab) are multiplie							rated north	lio totale (	0-T)												+
The program-level derates are to be determined by the IOU such that the program-							rated portio	nio totais (	ų-ij.												+
'N/A" denotes rows not derated (derates are only applied to IOU portfolio in aggre		sum to the		, and crone u	- Frogramme																
	· · · · ·		PG8	E DR Alloc	ations for	2022 Estimated According to	Load Im	pact Pro	tocols (L	IPs) Fina	al Report	3	•					· · · · ·			-
Average of	Hourly Ex A	nte Load In	pacts (MW	() from 4-9	PM at Port	olio Level on Monthly Peak Loa	id Days U	nder 1-in-	2 Weath	er Year (	Conditions	, Before	Adjusting f	for Avoide	ed Line Losses						Ξ
Instructions: Please cr	omplete the	Payments a	and Local C	apacity Are	a (LCA) co	lumns below. If payment for a p	orogram is	from bu	ndled cus	tomers o	nly, enter	0. If payr	nent is fro	m distribu	ution customers, er	nter 1.					
		Note: RA			Event-Base	d Programs/Load Modifying Re	esources	vill be ret	lected in	the CEC	load fore										_
				Derates								Origi	nal Monti	IV NQC	Values E	LCC Adj	usted Val	Jes			_
		ELCC %	ELCC %	ELCC %	ELCC %																
	L .	of Jun	of Jul 2020	of Aug 2020	of Sep											Jul-22			Oct-22		1
Event-Based Programs/Supply-Side Programs	Payment	2020 N/A	2020 N/A	2020 N/A	2020 N/A	Local Capacity Area (LCA) Greater Bay Area	9.34	8.59	9.26	9.96	May-22 10.52		10.67	Aug-22 10.57	10.62 Sep-22 Jun-22	Jul-22	Aug-22	Sep-22	10.18	9.26	
		N/A	NA	N/A	N/A	Greater Fresno Area	11 13		9.63		10.92				11.05				10.18	9.63	
		N/A	N/A	NA	N/A	Humboldt	CONFIL		0.00	10.00	10.04	11.10	1 11.10	11.00	11.00	1			10.00	0.00	Ē
		N/A	N/A	N/A	N/A	Kern															
Base Interruptible Program (BIP)	1	N/A	N/A	N/A	N/A	Northern Coast	1														
		N/A	N∕A	N/A	N/A	Sierra	1														
		N/A	N/A	N/A	N/A	Stockton														_	
		N/A	N/A	N/A	N/A	Outside LCA	123.10		128.47	138.24	145.92	149.12	148.05							128.43	
		N/A	N/A	N/A	N/A	Total IOU Service Area	195.63	186.2	200.73	215.99	228.01	232.99	231.33	229.22	230.26				220.57	200.68	<u>i</u>
		N/A	N/A	N/A	N/A	Greater Bay Area	0.00	0.00	0.00	0.00	11.81	15.75	21.37	22.50	19.12				17.43	0.00	
		N/A	N/A	N/A	N/A	Greater Fresno Area	0.00	0.00	0.00	0.00	3.99	5.32	7.23	7.61	6.47	-			5.89	0.00	÷
		NA	NA	NA	N/A	Humboldt	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00	0.00	f
		N/A	NA	NA	N/A	Kern	0.00	0.00	0.00	0.00	0.99	1.32	1.79	1.88	1.60				1.46	0.00	Ē
Capacity Bidding Program Day Ahead (CBP DA) Non-Residential	1	N/A	N/A	N/A	N/A	Northern Coast	0.00	0.00	0.00	0.00	0.95	1.26	1.71	1.80	1.53				1.40	0.00	Ē
		N/A	N/A	N/A	N/A	Sierra	0.00	0.00	0.00	0.00	1.19	1.59	2.16	2.27	1.93				1.76	0.00	ſ
		N/A	N/A	N/A	N/A	Stockton	0.00	0.00	0.00	0.00	1.12	1.49	2.03	2.13	1.81				1.65	0.00	[
		N/A	N/A	N/A	N/A	Outside LCA	0.00	0.00	0.00	0.00	0.95	1.27	1.72	1.81	1.54				1.40	0.00	
		N/A	N∕A	N/A	N/A	Total IOU Service Area	0.00	0.00	0.00	0.00	21.00	28.00	38.00		34.00				31.00	0.00	_
		N/A	N/A	N/A	N/A	Greater Bay Area	0.00	0.00	0.00	0.00	3.53	3.53	7.07	7.07	7.07				3.53	0.00	_
		N/A	N/A N/A	N/A N/A	N/A	Greater Fresno Area	0.00	0.00	0.00	0.00	1.71	1.71	3.42	3.42	3.42				1.71	0.00	_
		N/A N/A	N/A N/A	N/A N/A	N/A N/A	Humboldt Kern	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00	0.00	-
Capacity Bidding Program Day Ahead (CBP DA) Residential	1	N/A	N/A N/A	N/A N/A	N/A N/A	Northern Coast	0.00	0.00	0.00	0.00	0.87	0.87	0.64	0.64	0.64				0.87	0.00	-
Sapacity bidding Frogram bay Anead (CBF DA) - Residential		N/A	NA	N/A	N/A	Sierra	0.00	0.00	0.00	0.00	1.82	1.82	3.64	3.64	3.64				1.82	0.00	-
		N/A	NA	NA	N/A	Stockton	0.00	0.00	0.00	0.00	0.89	0.89	1.79	1.79	1.79				0.89	0.00	-
		N/A	NA	NA	N/A	Outside LCA	0.00	0.00	0.00	0.00	2.05	2.05	4.10	4.10	4.10				2.05	0.00	
		N/A	NA	NA	N/A	Total IOU Service Area	0.00	0.00	0.00	0.00	11.00	11.00	22.00	22.00	22.00				11.00	0.00	-
		N/A	N∕A	N/A	N/A	Greater Bay Area	0.00	0.00	0.00	0.00	7.25	11.83	12.36	12.16	11.40				5.37	0.00	ſ
		N/A	N/A	N/A	N/A	Greater Fresno Area	0.00	0.00	0.00	0.00	4.69	6.24	6.43	5.82	5.32				2.93	0.00	ſ
		N/A	N/A	N/A	N/A	Humboldt	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				0.00	0.00	ĺ
		N/A	N/A	N/A	N/A	Kern	0.00	0.00	0.00	0.00	1.93	2.45	2.44	2.29	2.12				1.45	0.00	1
Air Conditioning (AC) Cycling Residential	1	N/A	N/A	N/A	N/A	Northern Coast	0.00	0.00	0.00	0.00	0.59	1.26	1.26	1.10	0.92				0.45	0.00	4
		N/A N/A	N/A N/A	N/A	N/A N/A	Sierra	0.00	0.00	0.00	0.00	3.20	6.67 3.25	6.50 3.37	6.26 3.01	4.94 2.36				1.22	0.00	Ļ
		N/A N/A	N/A N/A	N/A N/A	N/A N/A	Stockton Outside LCA	0.00	0.00	0.00	0.00	4.98	3.25	7.49	6.87	6.02				2.74	0.00	ł
		N/A	N/A N/A	N/A N/A	N/A N/A	Total IOU Service Area	0.00	0.00	0.00	0.00	24.33	38.89	39.85		33.08	-			2.74	0.00	f
		NA	NA	NA	N/A	Greater Bay Area	9.34	8.59	9.26	9.96	33.11	41.86	51.46	52.29	48.20				36.52	9.26	f
		N/A	NA	NA	N/A	Greater Fresno Area	11.13	8.94	9.63	10.36	21.33	24.45	28.18		26.26				21.12	9.63	Ē
		N/A	N/A	N/A	N/A	Humboldt	CONFIL														Í
		N/A	N/A	N/A	N/A	Kern															
2022 Total Event-Based/Supply-Side Programs		N/A	N/A	N/A	N/A	Northern Coast															
		N/A	N/A	N/A	N/A	Sierra															
		N/A	N/A	N/A	N/A	Stockton															1
		N/A	N/A	N/A	N/A	Outside LCA					153.90									128.43	
		78%	80%	82%	86%	Total IOU Service Area	1 195.63	186.20	1200.73	215.99	284.34	310.88	331.18	328.74	319.34 243.64	264 40	267.96	274.62	277.35	200.68	ø

# Tab: "PG&E IOU ELCC Derate" (2 of 2)

Critical Peak Pricing (CPP) Residential ("SmartRate")	0			Greater Bay Area Greater Fresno Area	0.22	0.22	0.22	0.33	0.48			0.63	0.73	0.67	0.67	0.40	0.22	0.22
Critical Peak Pricing (CPP) Residential ("SmartRate")	0			Greater Freene Area	0.05	0.05												
Critical Peak Pricing (CPP) Residential ("SmartRate")	0					0.25	0.25	1.11	1.34			1.71	1.79	1.70	1.57	1.05	0.25	0.25
Critical Peak Pricing (CPP) Residential ("SmartRate")	0			Humboldt	0.00	0.00	0.00	0.00	0.01			0.01	0.01	0.01	0.01	0.00	0.00	0.00
Critical Peak Pricing (CPP) Residential ("SmartRate")	0			Kern	0.12	0.12	0.12	0.49	0.52			0.68	0.68	0.64	0.61	0.43	0.12	0.12
				Northern Coast	0.07	0.07	0.07	0.08	0.15			0.19	0.21	0.20	0.19	0.11	0.07	0.07
				Sierra	0.36	0.36	0.36	0.46	0.66			0.92	0.98	0.90	0.82	0.39	0.36	0.36
				Stockton	0.22	0.22	0.22	0.33	0.53			0.71	0.78	0.71	0.67	0.35	0.22	0.22
				Outside LCA	0.50	0.50	0.50	0.79	1.15			1.56	1.66	1.54	1.42	0.74	0.50	0.50
				Total IOU Service Area	1.74	1.74	1.74	3.60	4.85			6.43	6.83	6.37	5.96	3.48	1.74	1.74
				Greater Bay Area	1.38	1.38	1.39	1.39	2.92			2.71	2.63	2.66	2.67	3.13	1.40	1.40
				Greater Fresno Area	0.74	0.74	0.77	0.77	1.87			1.17	1.00	1.30	1.48	2.37	0.72	0.72
				Humboldt	0.01	0.01	0.01	0.01	0.02			0.02	0.02	0.02	0.02	0.02	0.01	0.01
Critical Peak Pricing (CPP) Non-Residential ("Peak Day				Kern	0.45	0.45	0.47	0.47	1.02			0.85	0.83	0.88	0.90	1.10	0.45	0.45
Pricing")	0			Northern Coast	0.15	0.15	0.15	0.15	0.31			0.29	0.28	0.28	0.29	0.34	0.15	0.15
				Sierra	0.12	0.12	0.12	0.12	0.33			0.15	-0.19	0.18	0.28	0.66	0.11	0.11
				Stockton	0.11	0.11	0.11	0.11	0.37			0.10	-0.09	0.12	0.32	0.54	0.10	0.10
				Outside LCA	1.75	1.75	1.80	1.80	3.96			3.16	2.81	3.17	3.49	5.02	1.76	1.76
				Total IOU Service Area	4.71	4.71	4.81	4.81	10.80			8.45	7.29	8.61	9.45	13.19	4.69	4.69
ľ				Greater Bay Area	21.90	20.64	19.97	15.57	19.36		1	39.53	40.17	39.99	41.09	20.59	20.73	24.31
				Greater Fresno Area	1.96	1.83	1.73	1.64	3.59			9.76	10.40	9.85	8.83	3.07	1.90	2.29
				Humboldt	0.07	0.06	0.07	0.06	0.06			0.29	0.29	0.30	0.30	0.06	0.07	0.07
				Kern	0.55	0.52	0.49	0.52	1.13			3.16	3.29	3.25	2.87	0.99	0.56	0.67
Time of Use (TOU) Residential   Incremental	1			Northern Coast	4.32	4.03	3.92	3.05	3.49			7.03	7.22	6.87	6.95	3.59	4.21	4.84
. , .				Sierra	2.78	2.73	2.68	1.92	3.58			10.27	10.46	10.29	9.37	2.99	2.79	3.28
				Stockton	0.81	0.78	0.77	0.61	1.19			3.08	3.24	3.02	2.80	1.08	0.80	0.96
				Outside LCA	2.11	2.04	2.00	1.73	2.11			6.67	7.43	7.12	6.82	2.12	2.13	2.49
				Total IOU Service Area	34.51	32.63	31.64	25.11	34.51			79.78	82.50	80.68	79.03	34.49	33.17	38,90
r				Greater Bay Area	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Greater Fresno Area	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Humboldt	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Kern	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00	0.00	0.00	0.00	0.00
Time of Use (TOU) Non-Residential   Incremental	1			Northern Coast	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00	0.00	0.00	0.00	0.00
. ,				Sierra	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Stockton	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Outside LCA	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Total IOU Service Area	0.00	0.00	0.00	0.00	0.00			0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Greater Bay Area	23.50	22.24	21.58	17.29	22.75		4	42.88	43.53	43.32	44.43	24.13	22.35	25.93
				Greater Fresno Area	2.96	2.83	2.75	3.52	6.81			12.64	13.19	12.85	11.89	6.49	2.87	3.26
				Humboldt	0.08	0.08	0.08	0.07	0.08			0.32	0.31	0.32	0.32	0.09	0.08	0.08
2000 Total New French Decedil and Medificing Deces				Kern	1.12	1.08	1.08	1.47	2.68			4.70	4.79	4.77	4.37	2.52	1.12	1.23
2022 Total Non Event-Based/Load-Modifying Programs w/out Ember	aaea			Northern Coast	4.54	4.25	4.15	3.29	3.95			7.51	7.71	7.36	7.44	4.04	4.43	5.06
Values				Sierra	3.26	3.21	3.16	2.50	4.56			11.34	11.26	11.37	10.47	4.04	3.26	3.76
				Stockton	1.15	1.12	1.11	1.06	2.10			3.89	3.94	3.85	3.78	1.96	1.12	1.28
				Outside LCA	4.36	4.29	4.30	4.32	7.22			11.39	11.90	11.82	11.73	7.88	4.38	4.74
				Total IOU Service Area	40.97	39.09	38.20	33.52	50.15		9	94.67	96.62	95.66	94.44	51.15	39.61	45.34
2022 Total Event and Non Event-Based Programs/Load Supply-Side Load Modifying Programs	and				236.60	225.29	238.93	249.51	334.49		3	38.30	361.02	363.62	369.06	328.50	240.29	240.91

# Tab: "PG&E Program ELCC Derate" (1 of 2)

DERATED BY PROGRAM-LEVEL ELCC (CAISO edits in red)																						
These are the original spreadsheets from the Resource Adequacy Compliance Mater	rials webpage	on the CPUC	website with a	all changes sh	own in red	ext.																
The Program-level ELCC values (columns C-F, linked from ELCC Results tab) are mult							ed values (c	olumns Q-	T). The up	dated total	ls are also sh	nown.										
"N/A" denotes rows not derated (derates are only applied to LCA-level programs wi	ith correspond	ding ELCC res	ults).																			
						2022 Estimated According to																
						folio Level on Monthly Peak Loa																
Instructions: Please co	omplete the					lumns below. If payment for a p								om distribu	tion custo	mers, er	nter 1.					
	1	Note: RA			Event-Bas	ed Programs/Load Modifying Re	esources v	vill be ref	lected in	the CEC	load fored											1
		ELCC %	ELCC I	ELCC %	ELCC %							Origii	hai Monti	nly NQC V	values	EL		sted Val	ues			
		of Jun	of Jul	of Aug	of Sep	'																
Event-Based Programs/Supply-Side Programs	Payment	2020	2020	2020	2020	Local Capacity Area (LCA)	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sen-22	Jun-22	Jul-22	Aug-22	Sen-22	Oct-22	Nov-22	Dec-22
Eron Buoou Programo oupply ondo Programo	. aymont	75%	78%	79%	83%	Greater Bay Area	9.34	8.59	9.26	9.96	10.52	10.75	10.67	10.57	10.62	8.12	8.33	8.38	8.82	10.18	9.26	9.02
		75%	78%	79%	83%	Greater Fresno Area	11.13	8.94	9.63	10.36		11.18	11.10	11.00	11.05	8.44	8.67	8.72	9.18	10.58	9.63	9.38
		75%	78%	79%	83%	Humboldt	CONFID	ENTIAL														
Base Interruptible Program (BIP) (Note: PG&E BIP ELCC was		75%	78%	79%	83%	Kern																
valued for all LCAs in aggregate due to confidential information)	1	75%	78%	79%	83%	Northern Coast																
		75%	78%	79%	83%	Sierra	-															
		75%	78%	79%	83%	Stockton	400.40	440.47	400.47	400.01	445.00	440.42	440.05	440.70	447.07	440.50	445.01	440.00	400.00	444.47	400.40	405.47
		75% 75%	78% 78%	79% 79%	83% 83%	Outside LCA Total IOU Service Area	123.10 195.63				145.92 228.01				147.37 230.26		115.64	116.28	122.39 191.23		128.43 200.68	
																	100.00	181.69				
		90%	90%	90%	90%	Greater Bay Area	0.00	0.00	0.00	0.00	11.81	15.75	21.37	22.50	19.12	14.22	19.30	20.31	17.27	17.43	0.00	0.00
		109%	109%	109%	109%	Greater Fresno Area	0.00	0.00	0.00	0.00	3.99	5.32	7.23	7.61	6.47	5.81	7.89	8.31	7.06	5.89	0.00	0.00
		N/A	N/A	N/A	N/A	Humboldt	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	0.00
Capacity Bidding Program Day Ahead (CBP DA) Non-Residential	1	184%	184%	184%	184%	Kern	0.00	0.00	0.00	0.00	0.99	1.32	1.79	1.88	1.60	2.43	3.29	3.47	2.95	1.46	0.00	0.00
Capacity Bidding Program Day Allead (CBP DA) Non-Residential	· ·	462%	462%	462%	462%	Northern Coast	0.00	0.00	0.00	0.00	0.95	1.26	1.71	1.80	1.53	5.83	7.92	8.33	7.08	1.40	0.00	0.00
		40%	40%	40%	40%	Sierra	0.00	0.00	0.00	0.00	1.19	1.59	2.16	2.27	1.93	0.63	0.85	0.90	0.76	1.76	0.00	0.00
		N/A	N/A	N/A	N/A	Stockton	0.00	0.00	0.00	0.00	1.12	1.49	2.03	2.13	1.81	1.49	2.03		1.81	1.65	0.00	0.00
		327%	327%	327%	327%	Outside LCA	0.00	0.00	0.00	0.00	0.95	1.27	1.72	1.81	1.54	4.14	5.62	5.92	5.03	1.40	0.00	0.00
	-	N/A	N/A	N/A	N/A	Total IOU Service Area	0.00	0.00	0.00	0.00	21.00	28.00	38.00	40.00	34.00	34.56	46.90		41.96	31.00	0.00	0.00
		90% 109%	90% 109%	90% 109%	90% 109%	Greater Bay Area Greater Fresno Area	0.00	0.00	0.00	0.00	3.53	3.53	7.07 3.42	7.07 3.42	7.07 3.42	3.19 1.87	6.38 3.74	6.38 3.74	6.38 3.74	3.53	0.00	0.00
		N/A	N/A	109% N/A	N/A	Humboldt	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		184%	184%	184%	184%	Kern	0.00	0.00	0.00	0.00	0.67	0.67	1.34	1.34	1.34	1.24	2.47	2.47	2.47	0.67	0.00	0.00
Capacity Bidding Program Day Ahead (CBP DA) Residential	1	462%	462%	462%	462%	Northern Coast	0.00	0.00	0.00	0.00	0.32	0.32	0.64	0.64	0.64	1.47	2.94	2.94	2.94	0.32	0.00	0.00
		40%	40%	40%	40%	Sierra	0.00	0.00	0.00	0.00	1.82	1.82	3.64	3.64	3.64	0.72	1.44		1.44	1.82	0.00	0.00
		N/A	N/A	N/A	N/A	Stockton	0.00	0.00	0.00	0.00	0.89	0.89	1.79	1.79	1.79	0.89	1.79	1.79	1.79	0.89	0.00	0.00
		327%	327%	327%	327%	Outside LCA	0.00	0.00	0.00	0.00	2.05	2.05	4.10	4.10	4.10	6.71	13.43	13.43	13.43	2.05	0.00	0.00
		N/A	N/A	N⁄A	N/A	Total IOU Service Area	0.00	0.00	0.00	0.00	11.00		22.00	22.00	22.00	16.09	32.19		32.19	11.00	0.00	0.00
		47%	44%	47%	50%	Greater Bay Area	0.00	0.00	0.00	0.00	7.25	11.83	12.36	12.16	11.40	5.52	5.43	5.68	5.68	5.37	0.00	0.00
		33%	33%	37%	42%	Greater Fresno Area	0.00	0.00	0.00	0.00	4.69	6.24	6.43	5.82	5.32	2.08	2.15		2.22	2.93	0.00	0.00
		N/A	N/A	N/A	N/A	Humboldt	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Air Conditioning (AC) Cycling Residential	1	N/A 23%	N/A 23%	N/A 23%	N/A 46%	Kern Northern Coast	0.00	0.00	0.00	0.00	1.93 0.59	2.45	2.44	2.29	2.12 0.92	2.45 0.29	2.44	2.29	2.12 0.42	1.45 0.45	0.00	0.00
Air conditioning (Ac) cycling Residential		23% 68%	23% 68%	23% 68%	46%	Northern Coast Sierra	0.00	0.00	0.00	0.00	3.20	1.26 6.67	6.50	6.26	4.94	4.56	0.29	4.28	4.34	1.22	0.00	0.00
		68% 64%	68% 64%	68% 64%	88%	Stockton	0.00	0.00	0.00	0.00	3.20	3.25	3.37	3.01	2.36	2.08	2.15	4.28	4.34	0.62	0.00	0.00
		56%	51%	56%	62%	Outside LCA	0.00	0.00	0.00	0.00	4.98	7.19	7.49	6.87	6.02	4.04	3.83	3.86	3.76	2.74	0.00	0.00
		N/A	N/A	N/A	N/A	Total IOU Service Area	0.00	0.00	0.00	0.00	24.33		39.85	37.52	33.08		20.73		20.42	14.78	0.00	0.00
		N/A	N/A	N/A	N/A	Greater Bay Area	9.34	8.59	9.26	9.96	33.11	41.86	51.46	52.29	48.20	31.05	39.44	40.75	38.14	36.52	9.26	9.02
		N/A	N/A	N/A	N/A	Greater Fresno Area	11.13	8.94	9.63	10.36	21.33	24.45	28.18	27.85	26.26	18.20	22.44	22.92	22.19	21.12	9.63	9.38
		N/A	N/A	N/A	N/A	Humboldt	CONFID	ENTIAL														
		N/A	N/A	N⁄A	N/A	Kern																
2022 Total Event-Based/Supply-Side Programs		N/A	N/A	N∕A	N/A	Northern Coast																
		N/A	N/A	N⁄A	N/A	Sierra																
		N/A	N/A	N/A	N/A	Stockton																
		N/A	N/A	N/A	N/A	Outside LCA								159.48			138.51	139.48	144.60	147.36		
		N/A	N/A	N⁄A	N/A	Total IOU Service Area	195.63	186.20	200.73	215.99	284.34	310.88	331.18	328.74	319.34	247.56	280.50	283.69	285.80	277.35	200.68	195.57

# Tab: "PG&E Program ELCC Derate" (2 of 2)

Non Event-Based Programs/Demand-Side Programs					Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22
				Greater Bay Area	0.22	0.22	0.22	0.33	0.48	0.63	0.73	0.67	0.67	0.40	0.22	0.22
				Greater Fresno Area	0.25	0.25	0.25	1.11	1.34	1.71	1.79	1.70	1.57	1.05	0.25	0.25
				Humboldt	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
				Kern	0.12	0.12	0.12	0.49	0.52	0.68	0.68	0.64	0.61	0.43	0.12	0.12
Critical Peak Pricing (CPP) Residential ("SmartRate")	0			Northern Coast	0.07	0.07	0.07	0.08	0.15	0.19	0.21	0.20	0.19	0.11	0.07	0.07
				Sierra	0.36	0.36	0.36	0.46	0.66	0.92	0.98	0.90	0.82	0.39	0.36	0.36
				Stockton	0.22	0.22	0.22	0.33	0.53	0.71	0.78	0.71	0.67	0.35	0.22	0.22
				Outside LCA	0.50	0.50	0.50	0.79	1.15	1.56	1.66	1.54	1.42	0.74	0.50	0.50
				Total IOU Service Area	1.74	1.74	1.74	3.60	4.85	6.43	6.83	6.37	5.96	3.48	1.74	1.74
				Greater Bay Area	1.38	1.38	1.39	1.39	2.92	2.71	2.63	2.66	2.67	3.13	1.40	1.40
				Greater Fresno Area	0.74	0.74	0.77	0.77	1.87	1.17	1.00	1.30	1.48	2.37	0.72	0.72
				Humboldt	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01
Critical Peak Pricing (CPP) Non-Residential ("Peak Day				Kern	0.45	0.45	0.47	0.47	1.02	0.85	0.83	0.88	0.90	1.10	0.45	0.45
Pricing")	0			Northern Coast	0.15	0.15	0.15	0.15	0.31	0.29	0.28	0.28	0.29	0.34	0.15	0.15
				Sierra	0.12	0.12	0.12		0.33	0.15	-0.19	0.18	0.28	0.66	0.11	0.11
				Stockton	0.12	0.12	0.12	0.12	0.37	0.10	-0.09	0.12	0.32	0.54	0.10	0.10
				Outside LCA	1.75	1.75	1.80	1.80	3.96	3.16	2.81	3.17	3.49	5.02	1.76	1.76
				Total IOU Service Area	4.71	4.71	4.81		10.80	8.45	7.29	8.61	9.49 9.45	13.19	4.69	4.69
			 		21.90	20.64	4.01 19.97		19.36	39.53	40.17	39.99	41.09	20.59	20.73	24.31
				Greater Bay Area Greater Fresno Area	1.90	20.64	19.97	15.57	3.59	39.53 9.76	40.17	9.85	8.83	20.59	20.73	24.31
				Humboldt	0.07	0.06	0.07	0.06	0.06	0.29	0.29	0.30	0.30	0.06	0.07	0.07
				Kern	0.55	0.52	0.49	0.52	1.13	3.16	3.29	3.25	2.87	0.99	0.56	0.67
Time of Use (TOU) Residential   Incremental	1			Northern Coast	4.32	4.03	3.92	3.05	3.49	7.03	7.22	6.87	6.95	3.59	4.21	4.84
				Sierra	2.78	2.73	2.68	1.92	3.58	10.27	10.46	10.29	9.37	2.99	2.79	3.28
				Stockton	0.81	0.78	0.77	0.61	1.19	3.08	3.24	3.02	2.80	1.08	0.80	0.96
				Outside LCA	2.11	2.04	2.00	1.73	2.11	6.67	7.43	7.12	6.82	2.12	2.13	2.49
				Total IOU Service Area	34.51	32.63	31.64	25.11	34.51	79.78	82.50	80.68	79.03	34.49	33.17	38.90
				Greater Bay Area	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Greater Fresno Area	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Humboldt	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Kern	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Time of Use (TOU) Non-Residential   Incremental	1			Northern Coast	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Sierra	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Stockton	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Outside LCA	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Total IOU Service Area	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				Greater Bay Area	23.50	22.24	21.58	17.29	22.75	42.88	43.53	43.32	44.43	24.13	22.35	25.93
				Greater Fresno Area	2.96	2.83	2.75	3.52	6.81	12.64	13.19	12.85	11.89	6.49	2.87	3.26
				Humboldt	0.08	0.08	0.08	0.07	0.08	0.32	0.31	0.32	0.32	0.49	0.08	0.08
				Kern	1.12	1.08	1.08	1.47	2.68	4.70	4.79	4.77	4.37	2.52	1.12	1.23
2022 Total Non Event-Based/Load-Modifying Programs w/out Embe	edded			Northern Coast	4.54	4.25	4.15	3.29	3.95	7.51	7.71	7.36	7.44	4.04	4.43	5.06
Values				Sierra	3.26	3.21	3.16		4.56	11.34	11.26	11.37	10.47	4.04	3.26	3.76
				Stockton	1.15	1.12	1.11	1.06	2.10	3.89	3.94	3.85	3.78	4.04	1.12	1.28
				Outside LCA	4.36					3.89			3.78			
						4.29	4.30	4.32	7.22		11.90	11.82		7.88	4.38	4.74
				Total IOU Service Area	40.97	39.09	38.20	33.52	50.15	94.67	96.62	95.66	94.44	51.15	39.61	45.34
	and															
2022 Total Event and Non Event-Based Programs/Load Supply-Side Load Modifying Programs	e ano				236.60	225.29	238.93	249.51	334.49	342.23	377.12	379.34	380.24	328.50	240.29	240.91

## Tab: "SCE IOU ELCC Derate"

DERATED BY IOU-LEVEL ELCC (CAISO edits in red)																						
These are the original spreadsheets from the Resource Adequacy Co	mpliance Materia	als webpage on	the CPUC websi	te with all chan	ges shown in r	red text.																
The IOU-level ELCC values (columns C-F, linked from ELCC Results ta							rated portfolio t	otals (Q-T).														
The program-level derates are to be determined by the IOU such that			um to the derat	ed total (theref	ore the progra	m-level allocations are left blank).																
'N/A" denotes rows not derated (derates are only applied to IOU po	rtfolio in aggrega	ate).				SCE DR for 2022 E	a film a fa al A a	a and los of a 1 a	and laws and D	mata a a la 71 ll	Da) Elsal Day											1
			Average	of Hourly Ex	Anto Load L	mpacts (MW) from 4-9 PM at Port							Refore Adjusti	na for Aunide	ad Lina Lossa	0						
		Instru				and Local Capacity Area (LCA) co																
						benefits for Non Event Event-Bas																
			ELCC	Derates									riginal Month		Jes		ELCC Adju	sted Values				
		ELCC % of	ELCC % of	ELCC % of	ELCC %	of																
Event-Based Programs/Supply-Side Resources	Payments	Jun 2020	Jul 2020	Aug 2020	Sep 202	Local Capacity Area (LCA)	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22
		N/A N/A	N/A N/A	N/A N/A	N/A N/A	LA Basin Big Creek/Ventura	CONFIDEN	TIAL														
Base Interruptible Program (BIP) 15 min	1	NA	NA	N/A	N/A	Outside LCA	44.15	49.66	50.34	56.12	58.42	55.63	59.06	54.05	58.46	1			1	63.49	63.47	52.24
		NA	N/A	N/A	N/A	Total IOU Service Area	144.60	156.50	144.70	156.70	164.80	167.10	166.70	168.10	167.90					167.10	173.20	153.00
		N/A	N/A	N/A	N/A	LA Basin	313.82	339.19	315.66	317.91	304.58	312.52	298.46	309.38	308.12					306.11	318.48	292.22
Page Interruntible Program (PID) 20 min	1	N/A	N/A	N/A	N/A	Big Creek/Ventura	CONFIDEN	TIAL														
Base Interruptible Program (BIP) 30 min	1	N/A	N/A	N∕A	N/A	Outside LCA																
		NA	N/A	N/A	N/A	Total IOU Service Area	373.60	397.70	372.00	388.00	373.90	382.20	359.90	375.10	378.30					368.70	376.60	354.20
		NA	N/A	N/A	N/A	LA Basin	3.07	3.14	3.87	4.44	4.55	4.74	4.92	4.96	5.01					4.77	4.66	3.71
Agricultural and Pumping Interruptible (API)	1	N/A N/A	N/A N/A	N/A N/A	N/A N/A	Big Creek/Ventura Outside LCA	7.36	6.90 0.12	9.92 0.47	16.81 1.62	19.28	25.04 2.07	25.11 2.04	25.41 2.01	23.74					18.77	11.03 0.85	7.39
		NA	N/A	N/A N/A	N/A N/A	Total IOU Service Area																
			1973	1			10.60	10.20	14.30	22.90	25.70	31.90	32.10	32.40	30.70					25.00	16.50	11.00
		N/A N/A	N/A N/A	N/A N/A	N/A N/A	LA Basin Big Creek/Ventura	0.23	0.23	0.23	0.23	CONFIDEN 0.85	0.85	0.85	0.85	0.85					0.85	0.23	0.23
Capacity Bidding Program Day Of (CBP DO)	1	NA	N/A	N/A	N/A	Outside LCA	0.00	0.00	0.00	0.00	CONFIDEN		0.00	0.00	0.85				1	0.85	0.00	0.00
		NA	NA	NA	NA	Total IOU Service Area	0.70	0.70	0.70	0.70	3.80		3.80	3.80	3.80				1	3.80	0.00	0.70
		N/A	N/A	N/A	N/A	LA Basin	0.00	0.00	0.00	0.00	CONFIDEN										0.00	0.00
Capacity Bidding Program Day Ahead (CBP DA)	1	N/A	N/A	N∕A	N/A	Big Creek/Ventura	0.00	0.00	0.00	0.00	0.44	0.44	0.44	0.44	0.44					0.44	0.00	0.00
oupdoidy bloaning i rogiani bay Alload (obi bAy	· ·	NA	N/A	N/A	N/A	Outside LCA	0.00	0.00	0.00	0.00	CONFIDEN										0.00	0.00
		N/A N/A	N/A N/A	N/A N/A	N/A N/A	Total IOU Service Area	0.00	0.00	0.00 2.08	0.00 8.70	3.80 8.86	3.80 8.40	3.80 11.62	3.80 11.97	3.80					3.80 11.19	0.00	0.00
		NA	NA	N/A N/A	N/A N/A	Big Creek/Ventura	0.00	0.00	0.26	1.98	2.21	2.66	3.30	3.35	3.30					2.62	1.70	0.00
AC Cycling ("Summer Discount Plan") Commercial	1	NA	NA	N/A	N/A	Outside LCA	0.00	0.00	0.20	0.63	0.83	1.07	1.38	1.14	1.13					0.63	0.32	0.00
		NA	NA	NA	NA	Total IOU Service Area	0.00	0.00	2.30	11.30	11.90	12.10	16.30	16.50	17.60					14.40	10.30	0.00
		N/A	N/A	N/A	N/A	LA Basin	0.00	0.00	0.00	31.22	33.62	47.21	98.93	116.22	124.22					70.32	26.05	0.00
	1	N/A	N/A	N/A	N/A	Big Creek/Ventura	0.00	0.00	0.00	0.25	1.54	12.23	18.02	18.36	15.46					3.95	1.19	0.00
AC Cycling ("Summer Discount Plan") Residential	1 '	N/A	N/A	N/A	N/A	Outside LCA	0.00	0.00	0.00	0.00	0.49	5.41	9.10	7.43	5.87					0.00	0.00	0.00
		N/A	N/A	N∕A	N/A	Total IOU Service Area	0.00	0.00	0.00	31.50	35.60	64.90	126.00	142.00	145.50					74.30	27.20	0.00
		NA	N/A	N/A	N/A	LA Basin	0.00	0.00	0.00	12.45	15.01	18.74	35.65	39.28	39.43					26.53	16.40	0.00
Peak Time Rebate (PTR) ("Smart Energy Program," previously "Save Power Day")	0	N/A N/A	N/A N/A	N/A N/A	N/A N/A	Big Creek/Ventura Outside LCA	0.00	0.00	0.00	0.00	2.40	3.94	6.14 1.26	6.27	5.49 0.89					2.88	0.00	0.00
previously Save Fower Day )		NA	NA	N/A	N/A	Total IOU Service Area	0.00	0.00	0.00	12.40	17.80	23.40	43.00	46.60	46.00					29.40	16.40	0.00
LCR	1	NA	N/A	NA	N/A		0.00	0.00	0.00	12.40	17.00	23.40	43.00	40.00	40.00					23.40	10.40	0.00
		NA	N/A	N∕A	N/A	LA Basin	377.93	407.35	383.09	437.42	437.91	465.36	519.74	555.11	564.56					489.42	439.01	355.79
2022 Total Event-Based Programs/Supply-Side Resour		N/A	N/A	N/A	N/A	Big Creek/Ventura	80.03	81.28	75.94	91.49	105.33	126.17	131.19	134.52	122.29					99.52	90.71	80.09
2022 Total Event-based Programs/Supply-Side Resour	Ces	N/A	N/A	N/A	N/A	Outside LCA	71.55	76.43	75.02	94.66	94.06	97.66	100.72	98.70	106.56					97.55	91.40	83.03
		85%	84%	79%	83%	Total IOU Service Area	529.50	565.10	534.00	623.50	637.30	689.20	751.60	788.30	793.60	582.91	630.34	622.75	655.96	686.50	620.90	518.90
New Front Deced December // and Madifulation																			1			
Non Event-Based Programs/Load Modifying Resources	Payments					Local Capacity Area (LCA)	Jan-22	Feb-22	Mar-22	Apr-22	May-22					Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22
	. ayments					LA Basin	0.00	0.00	0.00	0.00	0.00					0.00	0.00	0.00	0.00	0.00	0.00	0.00
Critical Peak Pricing (CPP) Medium and Small		1			1	Big Creek/Ventura	0.00	0.00	0.00	0.00	0.00					0.00	0.00	0.00	0.00	0.00	0.00	0.00
Customers	0	1			1	Outside LCA	0.00	0.00	0.00	0.00	0.00					0.00	0.00	0.00	0.00	0.00	0.00	0.00
		<u> </u>				Total IOU Service Area	0.00	0.00	0.00	0.00	0.00					0.00	0.00	0.00	0.00	0.00	0.00	0.00
						LA Basin	7.08	7.08	7.13	7.71	7.87					7.61	7.58	7.68	7.67	8.14	7.31	7.08
Critical Peak Pricing (CPP) Large Customers	0					Big Creek/Ventura	1							CONFI	DENTIAL							
						Outside LCA			0.40									0.50				
						Total IOU Service Area	8.10 0.11	8.10 0.07	8.10 0.25	8.80 0.30	9.00 0.26					8.70 0.65	8.60 -0.03	-0.20	-0.36	9.30 0.24	8.30 0.07	8.10 0.01
		1		1	1	Big Creek/Ventura	0.11	0.07	0.20	0.30	0.20				1	0.00	-0.03	-0.20	-0.30	0.24	0.07	0.01
Real Time Pricing (RTP)	0	1		1	1	Outside LCA								CONFIL	DENTIAL							
						Total IOU Service Area	0.10	0.10	0.20	0.30	0.30					0.60	0.00	-0.20	-0.30	0.20	0.10	0.00
						LA Basin	7.20	7.15	7.38	8.01	8.13					8.26	7.54	7.47	7.31	8.38	7.37	7.09
2022 Total Non Event-Based Programs/Load Modifying	Resources					Big Creek/Ventura	0.23	0.23	0.23	0.25	0.26					0.26	0.28	0.29	0.29	0.26	0.24	0.23
						Outside LCA	0.75	75.00	0.76	0.82	.83.					0.80	0.79	0.80	0.80	0.86	0.78	0.75
	-					Total IOU Service Area	8.20	8.20	8.30	9.10	9.30					9.30	8.60	8.50	8.40	9.50	8.40	8.10
	1	L			-					000.07	0.10.07							001.07		000.00	000.0-	
022 Total Event and Non Event-Based Programs							537.70	573.30	542.30	632.60	646.60					592.21	638.94	631.25	664.36	696.00	629.30	527.00

# Tab: "SCE Program ELCC Derate"

DERATED BY PROGRAM-LEVEL ELCC (CAISO edits in red)																						
These are the original spreadsheets from the Resource Adequacy Con																						
The Program-level ELCC values (columns C-F, linked from ELCC Resul "N/A" denotes rows not derated (derates are only applied to LCA-lev									odated totals are	also shown.												
N/A denotes rows not derated (derates are only applied to LCA-lev	ei programs witt	corresponding	ELCC results).	r denotes total	s that cannot b	e summed due to lack of information (c	confidential dat	a).														
	·			·	·	SCE DR for 2022 E	stimated Ac	cording to Lo	ad Impact Pi	rotocols (LIF	Ps) Final Re	oorts				·			·			
						pacts (MW) from 4-9 PM at Portf																
		Instruc	ctions: Please	e complete the		nd Local Capacity Area (LCA) col									ition custome	ers, enter 1.						
		1	ELCC	Derates	NOLE. FOR	benefits for Non Event Event-Base		Load wouldyin	y Resources	will be relied	teu in the CE		icinal Month		es	1	ELCC Adiu	sted Values		1		
		ELCC % of	ELCC % of	ELCC % of	ELCC % o	f						<u> </u>	igina monti	1100 100			ELOO Maja					
Event-Based Programs/Supply-Side Resources	Payments	Jun 2020	Jul 2020	Aug 2020	Sep 2020	Local Capacity Area (LCA)	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22
		75% 63%	78%	75%	76%	LA Basin	CONFIDEN	TIAL														
Base Interruptible Program (BIP) 15 min	1	63% 117%	65% 126%	65% 129%	60% 122%	Big Creek/Ventura Outside LCA	44.15	49.66	50.34	56.12	58.42	55.63	59.06	54.05	58.46	64 82	74 46	60.03	71.29	63.49	63.47	52.24
		NA	N/A	NA	N/A	Total IOU Service Area	144.60	156.50	144.70	156.70	164.80	167.10	166.70	168.10	167.90	2	2	2	?	167.10	173.20	153.00
		75%	78%	75%	76%	LA Basin	313.82	339.19	315.66	317.91	304.58	312.52	298.46	309.38	308.12	234.36	232.87	230.65	235.24	306.11	318.48	292.22
Base Interruptible Program (BIP) 30 min	1	63%	65%	65%	60%	Big Creek/Ventura	CONFIDEN	TIAL														
	1	117%	126%	129%	122%	Outside LCA																
		N/A 73%	N/A 63%	N/A 59%	N/A 63%	Total IOU Service Area	373.60 3.07	397.70 3.14	372.00 3.87	388.00 4.44	373.90 4.55	382.20 4.74	359.90 4.92	375.10	378.30 5.01	? 3.47	? 3.12	2.94	<b>?</b> 3.18	368.70 4.77	376.60 4.66	354.20 3.71
		98%	102%	100%	153%	Big Creek/Ventura	7.36	6.90	9.92	16.81	4.55	25.04	4.92	25.41	23.74	24.59	25.68	25.38	36.34	4.77	11.03	7.39
Agricultural and Pumping Interruptible (API)	1	80%	79%	80%	85%	Outside LCA	0.13	0.12	0.47	1.62	1.85	2.07	2.04	2.01	1.90	1.66	1.61	1.61	1.62	1.44	0.85	-0.13
		N/A	N/A	N/A	NA	Total IOU Service Area	10.60	10.20	14.30	22.90	25.70	31.90	32.10	32.40	30.70	29.72	30.41	29.93	41.14	25.00	16.50	11.00
		54%	54%	54%	54%	LA Basin	0.23	0.23	0.23	0.23	CONFIDEN					_	_	_		_	0.23	0.23
Capacity Bidding Program Day Of (CBP DO)	1	15%	15%	15%	15%	Big Creek/Ventura Outside LCA	0.51	0.51	0.51	0.51	0.85 CONFIDEN	0.85	0.85	0.85	0.85	0.13	0.13	0.13	0.13	0.85	0.51	0.51
		30%	30% N/A	30%	30% N/A	Total IOU Service Area	0.00	0.00	0.00	0.00	3.80		3.80	3.80	3.80	2	2	2	2	3.80	0.00	0.00
		54%	54%	54%	54%	LA Basin	0.00	0.00	0.00	0.00	CONFIDEN		0.00	0.00	0.00					0.00	0.00	0.00
Capacity Bidding Program Day Ahead (CBP DA)	1	15%	15%	15%	15%	Big Creek/Ventura	0.00	0.00	0.00	0.00	0.44	0.44	0.44	0.44	0.44	0.07	0.07	0.07	0.07	0.44	0.00	0.00
oupdoity blading rogram buy Alloud (obi bAy	1 ·	30%	30% N/A	30%	30% N/A	Outside LCA	0.00	0.00	0.00	0.00	CONFIDEN					2	2	-	2		0.00	0.00
		N/A 117%	N/A 91%	74%	N/A 88%	Total IOU Service Area LA Basin	0.00	0.00	0.00 2.08	0.00 8.70	3.80 8.86	3.80 8.40	3.80 11.62	3.80 11.97	3.80 13.15	9.84	7	? 8.88	7	3.80 11.19	0.00 8.33	0.00
		69%	55%	51%	72%	Big Creek/Ventura	0.00	0.00	0.26	1.98	2.21	2.66	3.30	3.35	3.30	1.85	1.83	1.72	2.37	2.62	1.70	0.00
AC Cycling ("Summer Discount Plan") Commercial	1	110%	71%	72%	93%	Outside LCA	0.00	0.00	0.00	0.63	0.83	1.07	1.38	1.14	1.13	1.18	0.97	0.82	1.05	0.63	0.32	0.00
		N/A	N/A	N/A	N/A	Total IOU Service Area	0.00	0.00	2.30	11.30	11.90	12.10	16.30	16.50	17.60	12.86	13.33	11.42	14.94	14.40	10.30	0.00
		117%	91%	74%	88%	LA Basin	0.00	0.00	0.00	31.22	33.62	47.21	98.93	116.22	124.22	55.29	89.63	86.24	108.91	70.32	26.05	0.00
AC Cycling ("Summer Discount Plan") Residential	1	69% 110%	55% 71%	51% 72%	72% 93%	Big Creek/Ventura Outside LCA	0.00	0.00	0.00	0.25	1.54 0.49	12.23 5.41	18.02 9.10	18.36 7.43	15.46 5.87	8.48	9.97 6.44	9.41 5.35	11.07 5.45	3.95	1.19	0.00
		N/A	N/A	NA	NA	Total IOU Service Area	0.00	0.00	0.00	31.50	35.60	64.90	126.00	142.00	145.50	69.74	106.04	101.00	125.42	74.30	27.20	0.00
		51%	47%	38%	41%	LA Basin	0.00	0.00	0.00	12.45	15.01	18.74	35.65	39.28	39.43	9.48	16.80	14.75	16.13	26.53	16.40	0.00
Peak Time Rebate (PTR) ("Smart Energy Program,"	0	49%	46%	38%	47%	Big Creek/Ventura	0.00	0.00	0.00	0.00	2.40	3.94	6.14	6.27	5.49	1.94	2.80	2.36	2.57	2.88	0.00	0.00
previously "Save Power Day")	1	60%	56%	56%	65%	Outside LCA	0.00	0.00	0.00	0.00	0.40	0.74	1.26	1.03	0.89	0.44	0.70	0.57	0.58	0.00	0.00	0.00
LCR		N/A 85%	N/A 85%	N/A 85%	N/A 80%	Total IOU Service Area	0.00	0.00	0.00	12.40	17.80	23.40	43.00	46.60	46.00	11.86	20.30	17.68	19.29	29.40	16.40	0.00
		N/A	N/A	NA	NA	LA Basin	377.93	407.35	383.09	437.42	437.91	465.36	519.74	555.11	564,56	?	?	?	?	489.42	439.01	355.79
2022 Total Event-Based Programs/Supply-Side Resour	COP	N/A	N/A	N/A	N/A	Big Creek/Ventura	80.03	81.28	75.94	91.49	105.33	126.17	131.19	134.52	122.29	?	?	?	?	99.52	90.71	80.09
2022 Fotal Event-Dased Programs/Supply-Side Resour	003	N/A	N/A	N/A	N/A	Outside LCA	71.55	76.43	75.02	94.66	94.06	97.66	100.72	98.70	106.56	?	?	?	?	97.55	91.40	83.03
	1	N/A	N/A	N/A	N/A	Total IOU Service Area	529.50	565.10	534.00	623.50	637.30	689.20	751.60	788.30	793.60	?	?	?	?	686.50	620.90	518.90
Non Event-Based Programs/Load Modifying																						
Resources	Payments					Local Capacity Area (LCA)	Jan-22	Feb-22	Mar-22	Apr-22	May-22					Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22
						LA Basin	0.00	0.00	0.00	0.00	0.00					0.00	0.00	0.00	0.00	0.00	0.00	0.00
Critical Peak Pricing (CPP) Medium and Small Customers	0					Big Creek/Ventura	0.00	0.00	0.00	0.00	0.00					0.00	0.00	0.00	0.00	0.00	0.00	0.00
Customers						Outside LCA Total IOU Service Area	0.00	0.00	0.00	0.00	0.00					0.00	0.00	0.00	0.00	0.00	0.00	0.00
						LA Basin	7.08	7.08	7.13	7.71	7.87					7.61	7.58	7.68	7.67	8.14	7.31	7.08
Critical Peak Pricing (CPP) Large Customers	0					Big Creek/Ventura								CONFID	ENTIAL							
or mour round Friding (or F) Large outfoliers						Outside LCA								CONFIL								
						Total IOU Service Area	8.10 0.11	8.10 0.07	8.10 0.25	8.80 0.30	9.00 0.26					8.70 0.65	8.60 -0.03	8.70 -0.20	8.70 -0.36	9.30 0.24	8.30 0.07	8.10 0.01
						Big Creek/Ventura	0.11	0.07	0.20	0.30	0.20	1				0.00	-0.03	-0.20	-0.30	0.24	0.07	0.01
Real Time Pricing (RTP)	0					Outside LCA								CONFIE	ENTIAL							
						Total IOU Service Area	0.10	0.10	0.20	0.30	0.30					0.60	0.00	-0.20	-0.30	0.20	0.10	0.00
						LA Basin	7.20	7.15	7.38	8.01	8.13					8.26	7.54	7.47	7.31	8.38	7.37	7.09
2022 Total Non Event-Based Programs/Load Modifying	Resources					Big Creek/Ventura Outside LCA	0.23	0.23 75.00	0.23 0.76	0.25	0.26					0.26	0.28	0.29	0.29	0.26	0.24	0.23
						Total IOU Service Area	8.20	8.20	8.30	9.10	9.30					9.30	8.60	8.50	8.40	9.50	8.40	8.10
	1					. otal 100 del vice Aled	0.20	0.20	0.30	9.10	9.30					9.30	0.00	0.00	0.40	9.00	0.40	0.10
2022 Total Event and Non Event-Based Programs							537.70	573.30	542.30	632.60	646.60					?	?	?	?	696.00	629.30	527.00

## Tab: "SDG&E IOU ELCC Derate"

DERATED BY IOU-LEVEL ELCC (CAISO edits in red)																					
These are the original spreadsheets from the Resource Adequacy Complia	ance Materials w	ebpage on the Cl	PUC website with	all changes show	wn in red text.																
The IOU-level ELCC values (columns C-F, linked from ELCC Results tab) and						Sep (L-O) to de	termine the d	erated portfo	olio totals (P-	5).											
The program-level derates are to be determined by the IOU such that the																					
"N/A" denotes rows not derated (derates are only applied to IOU portfoli	o in aggregate).																				
			S	DG&E DR Alle	ocations for F	Y2022, Est	imated Acc	ording to I	Load Impa	t Protocol	s (LIPs) Fin	al Reports									
	Average of I	Hourly Ex Ante	Load Impacts	(MW) from 4-	-9 PM at Portf	olio Level or	n Monthly Pe	eak Load D	ays Under 1	I-in-2 Weath	her Year Co	nditions, Be	fore Adjusti	ng for Avoide	ed Line Los	ses					
Instructi	ons: Please co	omplete the Pa	yments and Lo	cal Capacity	Area (LCA) co	lumns below	. If paymen	t for a prog	ram is from	bundled cu	stomers only	, enter 1. It	f payment is	from distrib	ution custo	mers, enter	1.				
			-		. ,						-										
		N	lote: RA benet	its for Non Eve	ent Event-Base	ed Programs	/I oad Modi	fvina Resou	rces will be	e reflected in	n the CEC lo	ad forecast	t adjustment	s.							
		1		Derates		1		.)					IV NOC Val			ELCC Adius	sted Values				
Event-Based Programs/Supply-Side Resources	Payments	ELCC % of	ELCC % of	ELCC % of	ELCC % of	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22
	1 ujinonto	Jun 2020	Jul 2020	Aug 2020	Sep 2020	0411 22					0000 22	001 22	/	000				000 11	000 22		200 22
BIP	1	N/A	N/A	N/A	N/A	0.99	0.84	1.10	1.01	0.98	1.16	1.10	1.09	1.21					1.03	1.16	0.80
CBP Day Of	1	N/A	N/A	N/A	N/A	0.00		0.00						3.36					3.36	0.00	0.00
CBP Day Ahead	1	N/A	N/A	N/A	N/A	0.00	0.00	0.00		0.22				0.22					0.22	0.00	0.00
Air Conditioning (AC) Cycling Day Of ("AC Saver DO")																					
Commercial	1	N/A	N/A	N/A	N/A	0.00	0.00	0.00	0.18	0.26	0.20	0.41	0.50	0.60					0.41	0.00	0.00
Air Conditioning (AC) Cycling Day Of ("AC Saver DO")																					
	1	N/A	N/A	N/A	N/A	0.00	0.00	0.00	0.00	0.23	0.02	1.02	1.54	1.88					1.01	0.00	0.00
Residential																					
Air Conditioning (AC) Day Ahead ("AC Saver DA")	1	N/A	N/A	N/A	N/A	0.00	0.00	0.00	0.38	0.55	0.51	0.88	1.10	1.25					0.78	0.15	0.00
Commercial Air Conditioning (AC) Day Ahead ("AC Saver DA")																					
	1	N/A	N/A	N/A	N/A	0.00	0.00	0.00	2.13	3.41	2.97	5.74	7.75	9.49					5.27	0.70	0.00
Residential						-				-											
2022 Total Event Based Programs/Supply-Side Resources		88%	63%	54%	49%	0.99	0.84	1.11	3.71	8.99	8.44	12.71	15.55	18.00	7.43	7.99	8.44	8.90	12.06	2.01	0.80
Non Event-Based Programs/Load Modifying Resources	Payments					Jan-22	Feb-22	Mar-22	Apr-22	May-22					Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22
CPP-D Large	1*					2.10	2,10	2.10	2.05	2.04					2.04	4.02	3.01	3.50	2.01	2.06	2.10
CPP-D Medium	1*					0.00		0.00							0.00	0.00	-0.69	1.71		0.00	0.00
EV-TOU 2	0					1.30	1.27	0.07	0.08	1.08					0.71	1.04	1.14	1.47	0.91	1.20	1.37
EV-TOU 5	0					4.28	4.30	2.09	2.02	3.95					5.29	6.60	6.99	8.64	6.20	4.59	5.03
TOU-1	0					1.78	0.07	-0.44	4.01	3.94					4.23	8.81	13.04	15.31	10.41	3.71	2.56
TOU-2	0					0.11		0.04							0.44	0.61	0.57	0.62		0.21	0.17
TOU and CPP Small Agricultural (w/out TD)	1*					0.00	0.00	0.00							0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOU and CPP Small Commercial (w/out TD)	1*					-0.04		-0.04							-0.05	-0.06	-0.06	-0.06	-0.05	-0.04	-0.04
CPP Small, Large and Medium on TD	1					0.00	0.00	0.00							0.04	0.07	0.11	0.15		0.01	0.00
TOU and CPP Residential (Voluntary, w/out TD)	1*					0.09	0.08	0.06							0.08	0.11	0.12	0.13		0.08	0.09
TOU and CPP Grandfather Residential (Voluntary, w/TD)	1*					0.00	0.00	0.00							0.00	0.00	0.00	0.00	0.00	0.00	0.00
CPP Residential on TD	1					0.03	0.02	0.03	0.03	0.03					0.03	0.04	0.04	0.04	0.03	0.03	0.03
2022 Total Non Event-Based Programs/Load Modifying						9.64	7.92	3.92	8.45	11.38					12.81	21.24	24.26	31.51	18.93	11.85	11.30
Resources						5.04	1.92	3.92	0.45	11.30					12.01	21.24	24.20	31.51	10.93	11.05	11.30
2022 Total Event and Non Event-Based Programs						10.63	8.76	5.03	12.16	20.37					20.24	29.24	32.71	40.41	30.99	13.86	12.11
Payment\$ - if payment for this program is from bundled customers only,																					
* CPP Implementation costs recovered from all customers, and annual or	ver- or under-col	llections are reco	vered from only	bundled custom	ers.																
Load impact benefits are applied to the peak Load Forecast.																					

# Tab: "SDG&E Program ELCC Derate"

DERATED BY PROGRAM-LEVEL ELCC (CAISO edits in red)																					
These are the original spreadsheets from the Resource Adequacy Compli	ance Materials w	ebpage on the CF	PUC website with	n all changes show	wn in red text.																
The Program-level ELCC values (columns C-F, linked from ELCC Results ta	b) are multiplied	by the program-	level DR allocatio	ons for the month	ns Jun-Sep (colun	nnns L-O) to d	letermine dera	ated values (c	olumns P-S). 1	The updated t	otals are also	shown.									
"N/A" denotes rows not derated (derates are only applied to LCA-level p	rograms with con	responding ELCC	results).																		
																					<u> </u>
	A	Laundar Ers Ander		DG&E DR Alle										and an Arrestal	ad Deal as						
Instant				s (MW) from 4-													4				
Instruct	ions: Please co	omplete the Pa	yments and Lo	bcal Capacity /	Area (LCA) col	iumns below	. If paymen	t for a progi	ram is from	bunalea cus	tomers only	, enter 1. I	r payment is	s from distric	DULION CUSIO	ners, enter	1.				
										a											
	1	I N		fits for Non Eve Derates	ent Event-Base	ed Programs	S/Load Modi	fying Resol	rces will be	reflected in			l adjustment			ELCC Adjust	ted Volue		r		
Event-Based Programs/Supply-Side Resources	Payments	ELCC % of	ELCC % of		ELCC % of	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22		Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22
Event-based Programs/Supply-Side Resources	Payments	Jun 2020	Jul 2020	Aug 2020	Sep 2020	JdII-22	Feb-22	Widf-22	Apr-22	Way-22	Jun-22	Jui-22	Aug-22	Sep-22	Juli-22	Jul-22	Aug-22	Sep-22	001-22	NOV-22	Dec-22
BIP	1	67%	67%	67%	62%	0.99	0.84	1.10	1.01	0.98	1.16	1.10	1.09	1.21	0.78	0.74	0.73	0.74	1.03	1.16	0.80
CBP Day Of	1	78%	78%	78%	78%	0.00	0.00	0.00	0.00	3.36	3.36	3.36	3.36	3.36	2.63	2.63	2.63	2.63	3.36	0.00	0.00
CBP Day Ahead	1	215%	215%	215%	215%	0.00	0.00	0.00	0.00	0.22	0.22	0.22	0.22	0.22	0.47	0.46	0.46	0.46	0.22	0.00	
Air Conditioning (AC) Cycling Day Of ("AC Saver DO")	1	314%	58%	42%	35%	0.00	0.00	0.00	0.18	0.26	0.20	0.41	0.50		0.63	0.24	0.21	0.21	0.41		
Commercial		01470	50%	42.70	0070	0.00	0.00	0.00	0.10	0.20	0.20	0.41	0.00	0.00	0.00	0.24	0.21	0.21	0.41	0.00	0.00
Air Conditioning (AC) Cycling Day Of ("AC Saver DO")	1	314%	58%	42%	35%	0.00	0.00	0.00	0.00	0.23	0.02	1.02	1.54	1.88	0.06	0.59	0.64	0.65	1.01	0.00	0.00
Residential		51470	30%	42 /0	3378	0.00	0.00	0.00	0.00	0.23	0.02	1.02	1.04	1.00	0.00	0.55	0.04	0.03	1.01	0.00	0.00
Air Conditioning (AC) Day Ahead ("AC Saver DA")	1	66%	55%	49%	46%	0.00	0.00	0.00	0.38	0.55	0.51	0.88	1.10	1.25	0.34	0.49	0.54	0.58	0.78	0.15	0.00
Commercial						0.00	0.00	0.00	0.00	0.00	0.01	0.00	1.10	1.20	0.01		0.01	0.00	0.70	0.10	
Air Conditioning (AC) Day Ahead ("AC Saver DA") Residential	1	66%	55%	49%	46%	0.00	0.00	0.00	2.13	3.41	2.97	5.74	7.75	9.49	1.96	3.18	3.82	4.40	5.27	0.70	0.00
2022 Total Event Based Programs/Supply-Side Resources		N/A	N∕A	N/A	N/A	0.99	0.84	1.11	3.71	8.99	8.44	12.71	15.55	18.00	6.86	8.32	9.04	9.67	12.06	2.01	0.80
Non Event-Based Programs/Load Modifying Resources	Payments					Jan-22	Feb-22	Mar-22	Apr-22	May-22					Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22
CPP-D Large	1*					2.10	2.10	2.10	2.05	2.04					2.04	4.02		3.50	2.01		2.10
CPP-D Medium	1*					0.00	0.00	0.00	0.00	0.00					0.00	0.00					
EV-TOU 2	0					1.30		0.07	0.08	1.08					0.71	1.04					
EV-TOU 5	0					4.28		2.09	2.02	3.95					5.29	6.60	6.99				
TOU-1	0					1.78		-0.44	4.01	3.94					4.23	8.81					
TOU-2	0					0.11		0.04		0.28					0.44	0.61	0.57				
TOU and CPP Small Agricultural (w/out TD)	1*					0.00		0.00	0.00	0.00					0.00	0.00					
TOU and CPP Small Commercial (w/out TD)	1*					-0.04		-0.04	-0.05	-0.05					-0.05	-0.06					
CPP Small, Large and Medium on TD	1					0.00		0.00	0.03	0.05					0.04	0.07					
TOU and CPP Residential (Voluntary, w/out TD)						0.09	0.08	0.06	0.06	0.07					0.08	0.11	0.12				
TOU and CPP Grandfather Residential (Voluntary, w/TD)	1*					0.00	0.00	0.00	0.00	0.00					0.00	0.00	0.00				
CPP Residential on TD	1					0.03	0.02	0.03	0.03	0.03					0.03	0.04	0.04	0.04	0.03	0.03	0.03
2022 Total Non Event-Based Programs/Load Modifying						9.64	7.92	3.92	8.45	11.38					12.81	21.24	24.26	31.51	18.93	11.85	11.30
Resources																					<u> </u>
2022 Total Event and Non Event-Based Programs						10.63	8.76	5.03	12.16	20.37					19.67	29.57	33.30	41.18	30.99	13.86	12.11
						10.00	0.10	0.00	12.10	10.01									50.00	10.00	
Payment\$ - if payment for this program is from bundled customers only,	optor 0 if all dict	ribution custome	ers onter 1																		
* CPP Implementation costs recovered from all customers, and annual c Load impact benefits are applied to the peak Load Forecast.				bundled custom	ers.																