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BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking To Enhance The Role Of Demand Response In Meeting The State's Resource Planning Needs And Operational Requirements.	R.13-09-011 (Filed September 19, 2013)

SOUTHERN CALIFORNIA EDISON COMPANY'S (U 338-E) COMPLIANCE FILING PURSUANT TO LOAD IMPACT PROTOCOL FILING REQUIREMENTS

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Dated: **April 3, 2017**

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Pursuant to the Rules of Practice and Procedure of the California Public Utilities Commission (Commission), as well as the load impact protocol requirements adopted in Commission Decision (D.)08-04-050, as modified by D.10-04-006, Southern California Edison Company (SCE) hereby submits for filing[1] the executive summary report of its annual study of demand response (DR) activities and accompanying summary tables. D.08-04-050, as modified by D.10-04-006, directs the California investor-owned utilities (IOUs) to file and serve the executive summaries of their reports, along with summary tables of each DR activity, annually on April 1 of each year.[2] The executive summary and accompanying summary tables for SCE's April 1, 2016 DR load impact reports, entitled "Southern California Edison's 2016 Demand Response Portfolio Summary Report" (Executive Summary), are attached hereto as **Appendix A**.

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1 Pursuant to the March 13, 2014 Email Ruling of ALJ Hymes directing the utilities to file their annual load impact reports in R.13-09-011 as the successor proceeding to R.07-01-041.

2 D.10-04-006, Ordering Paragraph (OP) 1, modifying OP 4 of D.08-04-050.

SCE has posted the public versions[3] of the final load impact reports and supporting tables for the SCE-specific DR programs on its website. In addition to these SCE-specific DR programs, SCE has posted the public versions of the final reports for the statewide DR programs, as required by OP 11 of D. 12-04-045. Because the files for these reports are quite large and voluminous, SCE is serving a Notice of Availability (NOA) for both the SCE-specific and statewide reports and tables on the Service List for this proceeding, as well as the members of the Demand Response Measurement Evaluation Committee (DRMEC). A copy of the NOA is attached hereto as **Appendix B**.[4] SCE's NOA contains the titles of the individual program reports, with instructions for accessing the documents on SCE's website and/or requesting a physical copy of the documents from SCE.

In addition to serving this filing on the Service List and members of the DRMEC, SCE is also providing the Commission's Energy Division with a copy of the complete reports, as required by D. 08-04-050, as modified by D.10-04-006. The confidential version of the complete reports provided to the Commission and Commission Staff, as well as the Energy Division, will include a Confidentiality Declaration in compliance with D.16-08-024 that provides a general description of the information that is confidential, the location of the confidential information, and the basis for confidential treatment. A copy of this Confidentiality Declaration is attached hereto as **Appendix C**.

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[3] SCE notes that some of the information contained in certain reports or supporting tables (for both the SCE-specific and Statewide reports) is confidential. For the public versions of such reports and tables, documents that are confidential in-part will be redacted, and documents that are wholly confidential will be replaced with a "placeholder" document.

[4] SCE notes that D.08-04-050, as modified by D.10-04-006, does not require the IOUs to file the individual reports with the CPUC. The "summary tables" required to be filed in compliance with OP 4 of D. 08-04-050, as modified by D.10-04-006, are attached as appendices to the Executive Summary, and are part of **Appendix A** hereto.

Respectfully submitted,

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April 3, 2017

Appendix A

Southern California Edison Company's PY2016 Demand Response Portfolio Summary Report

Southern California Edison 2016 Demand Response Portfolio Summary Report

April 1, 2017

Prepared for

Southern California Edison Co.

Prepared by

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CALMAC Study ID SCE0410

Confidential information is redacted and denoted with black highlighting: [redacted]

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1 Introduction

This report summarizes the load reduction capabilities of the Southern California Edison Co. (SCE) portfolio of demand response (DR) programs. It details the load impacts from 2016 events (ex post load impacts) and load reduction capabilities for 2017 through 2027 under normal (1-in-2 year) and extreme (1-in-10 year) system conditions (ex ante load impacts). This report adheres to the April 8, 2010 decision by the California Public Utilities Commission (CPUC) that requires a DR portfolio summary and specifies the format and content of the summary.[1]

SCE's DR portfolio is comprised of 15 DR resources listed in Table 1-1. Two programs listed in the CPUC decision are not included in this report. Optional Binding Mandatory Curtailment (OBMC) is a program of last resort, triggered immediately prior to rolling blackouts and is not considered a DR program by SCE. The Scheduled Load Reduction Program (SLRP) is also not included because there are no participants in the program and no enrollments are projected for future years.

Table 1-1: Categorization of SCE DR Programs

Emergency	Price-responsive	Demand Response Aggregator-managed	SmartConnect® - enabled	Nonevent Based
▪ Base Interruptible Program with 15-minute advance notice (BIP-15)	▪ Summer Discount Plan – Commercial (SDP-C)	▪ Capacity Bidding Program with Day-ahead Notification (CBP-DA)	▪ Save Power Day (SPD) - with enabling technology	▪ Real Time Pricing (RTP)
▪ Base Interruptible Program with 30-minute advance notice (BIP-30)	▪ Summer Discount Plan - Residential (SDP-R)	▪ Capacity Bidding Program with Day-of Notification (CBP-DO)		▪ Permanent Load Shifting (PLS)
▪ Agricultural and Pumping Interruptible Program (AP-I)	▪ Default Critical Peak Pricing (CPP) - Large	▪ Aggregator Managed Programs (AMP)		
	▪ Default Critical Peak Pricing (CPP) - Medium			
	▪ Default Critical Peak Pricing (CPP) - Small			
	▪ Demand Bidding Program (DBP)			

[1] Decision (D.) 10-04-006

The following reports from the 2016 program evaluations for all of SCE's DR resources were filed with the CPUC by SCE on April 3, 2017 in accordance with the CPUC Load Impact Protocols[2] (Protocols):

- Collins, Cummings, and Bell. 2016 Load Impact Evaluation of Southern California Edison's Agriculture and Pumping Interruptible Program. Final Report. April 1, 2017.
- Potter and Ciccone. 2016 Load Impact Evaluation of California Statewide Base Interruptible Program. Final Report. April 1, 2017.
- Bell, Blundell, Ciccone, Cummings. 2016 Load Impact Evaluation of California's Statewide Nonresidential Critical Peak Pricing Program and SCTD Commercial Thermostats. Final Report. April 1, 2017.
- Nguyen, Duer, Parmenter, Marrin. 2016 Statewide Load Impact Evaluation of California Aggregator Demand Response Programs: Ex Post and Ex Ante Load Impacts. April 1, 2017.
- Hansen and Huegerich. 2016 Load Impact Evaluation of California Statewide Demand Bidding Programs (DBP) for Non-Residential Customers: Ex-Post and Ex-Ante Report. April 1, 2017.
- Schellenberg, Collins, and Flaherman. 2016 Load Impact Evaluation of Southern California Edison's Peak Time Rebate Program. Final Report. April 1, 2017.
- Schellenberg, Collins, and Stansell. 2016 Load Impact Evaluation of Southern California Edison's Summer Discount Plan. Final Report. April 1, 2017.
- Bell and Gai. 2016 Load Impact Evaluation of the California Statewide Permanent Load Shifting Program. Final Report. April 1, 2017.

Ex post load impacts are summarized for all programs that experienced an event in 2016. Ex post load impacts determine what happened over an historical period, based on the conditions that were in effect during that time. Because historical performance is tied to past conditions such as weather, price levels, and dispatch strategy (e.g., localized dispatches), ex post load impacts may not reflect the full option value of a DR resource.

Ex ante load impacts are summarized for each program and for SCE's DR portfolio as a whole. Portfolio impacts summarize the load reduction that can be expected from all of SCE's DR programs if jointly dispatched. In other words, they avoid double counting load impacts from dually enrolled customers. Ex ante load impacts are forward-looking and are designed to reflect the load reduction capability of a DR resource under a standard set of conditions. Ex ante load impacts are estimated under normal (1-in-2 year) and extreme (1-in-10 year) weather conditions. Estimates have also been developed for two sets of weather conditions, one based on SCE-specific peaking conditions and one based on CAISO system peaking conditions. Estimates contained in the main body of this report are based on SCE-specific conditions. Estimates based on CAISO-specific peaking conditions are contained in the appendices.

This report begins with a description of the SCE DR programs covered in this executive summary, including current and forecasted program enrollment. The program overview section

[2] See CPUC Rulemaking 07-01-041, D.08-04-050, "Adopting Protocols for Estimating Demand Response Load Impacts" and Attachment A, "Protocols."

is followed by a summary of the methods employed in analyzing the ex post and ex ante load impacts for each program. The next two sections summarize the ex post and ex ante results for each program as well as the portfolio of programs collectively. The final section summarizes the recommendations contained in the 2016 program evaluation reports. Appendix A shows the proxy days used to develop ex ante weather conditions for SCE. Appendix B describes the regression specifications that were used in modeling customer load or estimating load impacts for each program evaluation. Appendices C through J contain the ex ante load impact tables that must be included in this portfolio summary. Finally, Appendix K presents SCE's demand response program capacity that can be used as reliability-based resources in years 2017 through 2027, as calculated per guidelines established by CPUC D.10-06-034.

2 Overview of Demand Response Programs

SCE's current programs can be assigned to one of five categories: reliability; price responsive; demand response aggregator managed; SmartConnect® -enabled programs; and nonevent based programs. In general, reliability programs are called when operating reserves are limited, either immediately prior to or during system emergencies. Price responsive programs can be called based on market conditions defined by market prices, generator heat rates, temperature, or other indicators. Price responsive in this context does not necessarily mean that customers in these programs face time-varying prices—it means that these programs can be dispatched in response to economic conditions in the wholesale market. In aggregator-managed programs, aggregators contract with commercial and industrial customers and deliver load reductions to the utility. Each aggregator forms a portfolio of individual customer accounts and nominates specific accounts for either an existing DR program such as the Capacity Bidding Program or for meeting contractual load reduction obligations. Nonevent based programs are not dispatchable, but provide explicit incentives or time-varying pricing to customers who shift or reduce loads during peak periods. SmartConnect®-enabled programs refer to programs that are tied to SCE's rollout of smart meters.

2.1 Reliability Programs

Reliability programs are called when operating reserves are limited, either immediately prior to or during system emergencies.

2.1.1 Base Interruptible Program

Each of California's three electric investor-owned utilities (IOUs) offer the Base Interruptible Program (BIP). BIP is a tariff-based, emergency-triggered demand response program that CAISO can dispatch for system emergencies. The IOUs can also dispatch BIP for local emergencies or on a measurement and evaluation event basis to verify the program's load reduction capability. The program can be dispatched both for instances when electricity system demand approaches installed generation capacity (a resource shortage) or in response to emergencies due to transmission and generation outages. Customers enrolled in BIP receive incentive payments in exchange for committing to reduce their electricity demand to a contractually-established level referred to as the Firm Service Level (FSL). Participants who fail to reduce load to the FSL are subject to a financial penalty assessed on a kWh basis. SCE differentiates BIP payment levels based on the timing in which the customer responds to dispatch notification; customers can commit to providing load reductions within 15 or 30 minutes of notification. The load impacts for both options are summarized in this report. BIP was integrated into the CAISO wholesale market in 2015.

2.1.2 Agricultural and Pumping Interruptible Program

The Agricultural and Pumping Interruptible (AP-I) program provides a monthly credit to eligible agricultural and pumping customers for allowing SCE to temporarily interrupt electric service to their pumping equipment during CAISO or other system emergencies. Agricultural and pumping customers with a measured demand of 37 kW or greater, or with at least 50 horsepower of connected load per service account, are eligible to participate in the AP-I program. Participating customers must already be served under an agricultural and pumping rate schedule. When an

interruption is deemed necessary and is allowed under the terms of the tariff, SCE sends a signal to the load control device installed on a customer's pumping equipment. The signal automatically turns off the equipment for the entire duration of the interruption event. The number of interruptions cannot exceed 1 per day, 4 per week, and 25 per calendar year. The duration of an interruption cannot exceed 6 hours and the total hours of interruption cannot exceed 40 per calendar month or 150 per calendar year. In exchange for allowing SCE to interrupt pumping service during emergencies, AP-I customers receive a monthly credit. For customers on time-of-use (TOU) rates, the credit is based on measured peak and mid-peak electricity demand. For customers that are not on a TOU rate, the credit is based on monthly usage. AP-I was integrated into the CAISO wholesale market in 2015.

2.2 Price Responsive Programs

The distinguishing feature of price-responsive programs is that they are dispatched based on economic criteria rather than solely for emergency conditions. SCE has the option of dispatching these programs when economic conditions—defined by market prices, generation heat rates, temperature, or other market indicators—are met.

2.2.1 Summer Discount Plan – Commercial

The Summer Discount Plan—Commercial (SDP-C)—is a central air conditioning (CAC) direct load control program for commercial customers. SCE began to operate SDP-C as a price-responsive program in 2013. During high system peak hours or emergency conditions, a signal is sent to control devices that limit the operation of the CAC unit. Participants can elect the level of load control—the cycling strategy. SDP-C has three plan options. The Maximum Comfort plan allows SCE to control CAC units up to nine minutes of every half hour, up to six hours a day. The Good Value plan offers CAC control up to 15 minutes of every half hour, up to 6 hours a day. The Maximum Savings plan offers complete CAC curtailment for up to six hours a day. The program is available year-round, can be called for up to six hours per day, and can be dispatched up to 180 hours per year, per participant. The load impacts and enrollment forecasts in this report are summarized across all options of the program for commercial customers. SDP-C was integrated into the CAISO wholesale market in 2015.

2.2.2 Summer Discount Plan – Residential

The Summer Discount Plan—Residential (SDP-R) program—is a CAC direct load control program for residential customers. SCE began to operate SDP-R as a price-responsive program in 2012. During high system peak hours or emergency conditions, a signal is sent to control devices that limit the operation of the CAC unit. The program is available year-round and for all hours of the day, but can only be called up to 6 hours per day and up to 180 hours a year for each participant. As with the SDP-C program, participants choose a cycling strategy. The Maximum Comfort plan offers CAC control up to 15 minutes of every half hour, up to 6 hours a day. The Maximum Savings plan offers complete CAC curtailment up to six hours a day. Both residential plans have an override option. In exchange for receiving a lower incentive, customers can press a button on the load control device, which allows the customer to override up to five event days per calendar year. For customers who have an outdoor CAC and no programmable communicating thermostat (PCT), the override option is only available if their CAC is located on the ground. The load impacts and enrollment forecasts in this report are

summarized across all options of the program for residential customers. SDP-R was integrated into the CAISO wholesale market in 2015.

2.2.3 Critical Peak Pricing

Critical Peak Pricing (CPP) is a dynamic pricing program for both residential and nonresidential customers on a time-of-use rate. In 2010, SCE's large customers with demands over 200 kW were defaulted onto CPP. In 2016, mostly large customers with peak demands exceeding 200 kW received service under CPP except for some voluntary small and medium business customers. SCE will default small and medium commercial customers with demands below 200 kW, in addition to large pumping and agricultural customers, to CPP in 2018. Residential customers may opt-in to CPP. Under this rate option, higher prices on critical peak days are offset by a reduction in off-peak prices or demand charges. CPP events occur on nonholiday weekdays between 2 to 6 PM. There are 12 CPP events each calendar year.

2.2.4 Demand Bidding Program

The Demand Bidding Program (DBP) is a voluntary demand reduction program that provides enrolled customers with the opportunity to receive bill credits for load reductions on event days. The program is designed to allow commercial and industrial facilities, of any size, to provide load reduction without firm commitments or participant risk. Because a firm commitment is not required, participants can decide whether or not to bid in load reduction on an event-by-event basis and even if they bid, there is no penalty for not providing the committed reduction. As such, the mix of event participants (versus enrolled participants) and magnitude of load reduction varies from event to event. DBP will be retired at the end of 2017.

2.3 Demand Response Aggregator Managed Programs

Aggregator managed programs are also price-responsive demand response (DR) resources, but they are given a separate category because customers typically, participate in these DR programs through a third party DR aggregator. In aggregator-managed programs, DR aggregators contract with commercial and industrial customers and deliver the aggregated load reduction to the utility. Each DR aggregator forms a portfolio of individual customer accounts and nominates specific accounts for either an existing demand response program such as the Capacity Bidding Program (CBP) or for meeting contractual load reduction obligations. The DR aggregator assumes responsibility for managing relationships with individual customers, arranging for load reductions on event days, receiving incentive payments, and paying penalties (if warranted) to the utility. Customers receive their incentives directly from the DR aggregator. SCE currently has two aggregator-managed programs: CBP and the Aggregator-managed Portfolio (AMP) program.

2.3.1 Capacity Bidding Program

CBP is an aggregator-managed DR program offered by all three IOUs. CBP provides aggregators with monthly capacity payments, paid on a per kW basis, based on the aggregator’s load reduction commitments for each month, plus additional energy payments, paid on a per kWh basis, based on actual electricity demand reductions during events. Each month, aggregators may adjust their nominated load reduction and the mix of customers that provide load reduction for the different event options (e.g., day-ahead or day-of notifications,

and event durations of either one-to-four hours, two-to-six hours, or four-to-eight hours). CBP events may be called on nonholiday weekdays, between the hours of 11 AM and 7 PM. CBP day-ahead (CBP-DA) and day-of (CBP-DO) resources are summarized separately in this report. SCE integrated most of its CBP portfolio into the CAISO wholesale energy market beginning June 18, 2015.

2.3.2 Aggregator Managed Portfolio Program

AMP is very similar to the CBP program but is not a statewide program. The primary difference between AMP and CBP is that AMP consists of CPUC-approved bilateral contracts, also known as demand response power purchase agreements, which are individually negotiated and span a specified period of time. Like CBP, AMP aggregators contract with commercial and industrial customers to act on their behalf with respect to all aspects of the program, including receiving notices from the utility, arranging for load reductions on event days, receiving incentive payments, and paying penalties to the utility (if warranted). Each AMP aggregator forms a portfolio of individual customer accounts so that their aggregated load meets or exceeds the DR contract capacity commitment and penalty risk is mitigated. SCE integrated most of its AMP portfolio into the CAISO wholesale energy market by July 2015.

2.4 SmartConnect®-enabled Programs

This report also provides ex post and ex ante load impact estimates for one program in the SmartConnect®-enabled category, which is a segment of demand response programs tied to SCE's rollout of smart meters.

Save Power Day (SPD) is a peak time rebate (PTR) program for bundled residential customers. In 2012 and 2013, SCE residential customers, regardless of whether or not they had opted-in for alert notification, were eligible to receive SPD bill credits. In 2014, SCE began to provide bill credits only to those accounts that opted-in for alert notifications. The Save Power Day program is a voluntary, behavior-based demand response program open to bundled-only SCE residential customers with SmartConnect® meters. The program has three types of customers: opt-in PTR, third party managed PTR+PCT (programmable communicating thermostat), and PTR+IHD (in-home display). Opt-in PTR customers voluntarily enroll to receive event day notifications by phone, text message, or e-mail. PTR+PCT customers have programmable communicating thermostats, which controls HVAC load, that can be controlled by a third party on event days. PTR+IHD customers received in-home displays with similar capabilities as the PCT. SPD provides bill credits to customers based on their specific load reduction on event days when high energy prices are anticipated, and both PTR+IHD and PTR+PCT customers are eligible to earn additional bill credits for utilizing enabling technology. SPD events occur on nonholiday weekdays between 2 to 6 PM.

2.5 Nonevent Based Programs

Nonevent based programs are not dispatchable, but provide load reduction or load shifting on a daily basis. These DR programs provide explicit incentives or time-varying pricing to customers that shift or reduce loads during peak periods.

2.5.1 Real Time Pricing

Real-time pricing (RTP) is a dynamic pricing tariff that charges participants for the electricity they consume based on hourly prices that vary according to day type and temperature. It attempts to incorporate time-varying components of energy costs and generation capacity costs. The RTP tariff consists of nine hourly pricing profiles that vary by season, day type, and daily maximum temperature as measured by the Los Angeles Civic Center weather station. The tariff is available to commercial and agricultural customers. Because the rate schedules are linked to variation in weather, participants experience higher prices on hotter days and a greater number of high-price days during extreme weather years than in normal weather years.

2.5.2 Permanent Load Shifting

The Permanent Load Shifting (PLS) program provides a one-time incentive payment ($875/kW shifted) to customers who install qualifying PLS-Thermal Energy Storage (TES) technology on typical central air conditioning units or process cooling equipment. Incentives are determined based on the designed load shift capability of the system and the project must undergo a feasibility study prepared by a licensed engineer. The load shift is typically accomplished through shifting of daytime chiller load to overnight hours. All electric customers on time-of-use electricity rates are eligible for the program, including residential, commercial, industrial, agricultural, direct access, and Community Choice Aggregation customers. To qualify for the PLS program incentive payment, customers must go through a program application, approval, and verification process. The total incentive amount is determined using a customer's peak load shift on their maximum cooling demand day (based on on-peak hours). The incentive payments are intended to offset a portion of the cost of installation, thereby making the system more attractive financially. Customers are required to shift load by running the TES system on weekdays during summer months, but program participants are also encouraged to shift load during nonsummer months to maximize their energy bill savings.

2.6 Program Enrollment

Table 2-1 summarizes the SCE DR enrollment forecasts for 2017 through 2027 reported at the portfolio level. Of the five program types, the largest enrollment growth is expected in the SmartConnect-enabled category. SPD with Tech is expected to grow from about 25,000 participants in 2017 to about 130,000 participants in 2027. Overall enrollment in the emergency, price responsive, and aggregator-managed program categories is expected to decline, and enrollment in nonevent based programs is forecast to increase slightly.

Within the emergency category, BIP-30, BIP-15, and AP-I are all expected to shrink by about 10% over the course of the forecast horizon. Within the price-responsive program category, CPP enrollment is expected to grow from about 3,400 participants in 2017 to over 103,000 participants in 2027 due to the default pricing option's expansion to medium and small customers. Enrollments in the CAC load control programs, SDP-C and SDP-R are expected to decline significantly, by approximately 60% and 40%, respectively, as SCE is planning to implement a new direct load control program. These declining SDP enrollments are counteracted in part by CPP Small and CPP Medium, amounting to a reduction of about 11,000 price-responsive program participants by 2027. Overall, enrollment in SCE DR programs is expected to grow by 28% from about 303,000 participants in 2017 to about 395,000 in 2027.

Table 2-1: SCE DR Portfolio Projected Enrollments for 2017–2027 by Program
(Values Reflect Expected Enrollment in August)

Program Type	Program	Forecast Year										
		2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Emergency	BIP 15-minute	58	57	56	55	54	53	53	53	53	53	53
	BIP 30-minute	522	512	501	491	481	472	472	472	472	472	472
	AP-I	1,177	1,159	1,139	1,121	1,103	1,085	1,085	1,085	1,085	1,085	1,085
Price-responsive	SDP-C	10,503	9,747	9,014	8,307	7,646	7,029	6,452	5,913	5,408	4,937	4,497
	SDP-R	259,776	246,682	234,636	223,108	212,076	201,519	191,417	181,749	172,497	163,643	155,171
	CPP-Large	2,326	2,333	2,340	2,347	2,354	2,361	2,368	2,375	2,382	2,389	2,396
	CPP - Medium	508	508	35,306	35,306	14,430	14,432	14,434	14,435	14,437	14,438	14,440
	CPP - Small	522	522	215,730	215,730	86,609	86,610	86,612	86,613	86,615	86,617	86,618
	DBP	629	0	0	0	0	0	0	0	0	0	0
Demand Response Aggregator-managed	CBP-DA	30	90	90	90	90	90	90	90	90	90	90
	CBP-DO	814	1,250	1,250	1,250	1,250	1,250	1,250	1,250	1,250	1,250	1,250
	AMP	1,276	0	0	0	0	0	0	0	0	0	0
SmartConnect®-enabled	SPD with Tech.	24,984	39,167	49,167	59,167	69,167	79,167	89,167	99,167	109,167	119,167	129,167
Nonevent Based	PLS	5	6	8	9	10	11	11	12	12	12	12
	RTP	150	150	150	150	150	150	150	150	150	150	150
Portfolio Total		**303,281**	**302,184**	**549,387**	**547,132**	**395,421**	**394,232**	**393,563**	**393,366**	**393,619**	**394,305**	**395,403**

3 Methodology

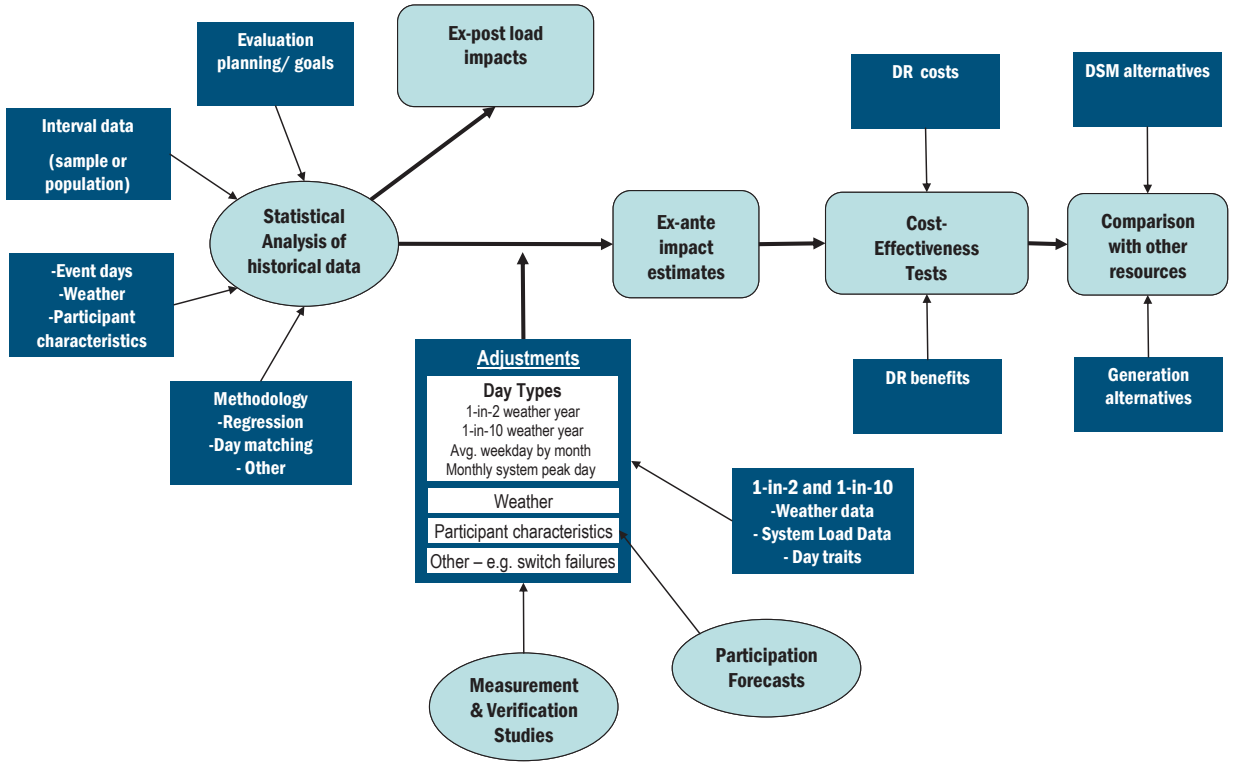
The 2016 evaluations address two main questions for DR programs: what demand reductions were delivered when resources were dispatched in 2016; and, what is the load reduction capability of each DR program?

Ex post impacts reflect the demand reductions attained during actual events, but do not necessarily reflect the load reduction capability of the DR program. Historical ex post results are tied to specific conditions that occurred for that given event, including weather conditions, the number of participants who were dispatched, the mix of customers, and other factors such as switch failure rates. Several programs are dispatched strategically to address congestion in specific zones, test load response capabilities, or for economic reasons. Due to the absence of extreme weather or system emergencies in 2016, emergency resources such as BIP were only dispatched to test load reduction capabilities. In addition, the timing and duration of event dispatch varied across event days for many programs. As a result, the impacts for individual event days are not necessarily representative of the full program capability.

Ex ante impacts reflect the load reduction capability of a DR program for each month under a weather conditions associated with standard 1-in-2 and 1-in-10 system peaking conditions. They reflect the reduction that can be attained if all enrolled participants are dispatched under the weather conditions that drive system planning. Whenever possible, ex ante load impacts are grounded in analysis of historical load impact performance. These estimates are used in assessing alternatives for meeting peak demand, cost-effectiveness comparisons, and long-term planning.

Figure 3-1 shows the connection between ex post load impacts, ex ante impacts, cost-effectiveness analysis, and resource planning. Analysis of historical program data is employed to produce ex ante load impact estimates that are subsequently used for resource adequacy, cost-effectiveness assessment and, by connection, resource planning.

Figure 3-1: Summary of Ex Post and Ex Ante Analysis Process and Connections



3.1 Selection of Ex Ante Weather Conditions

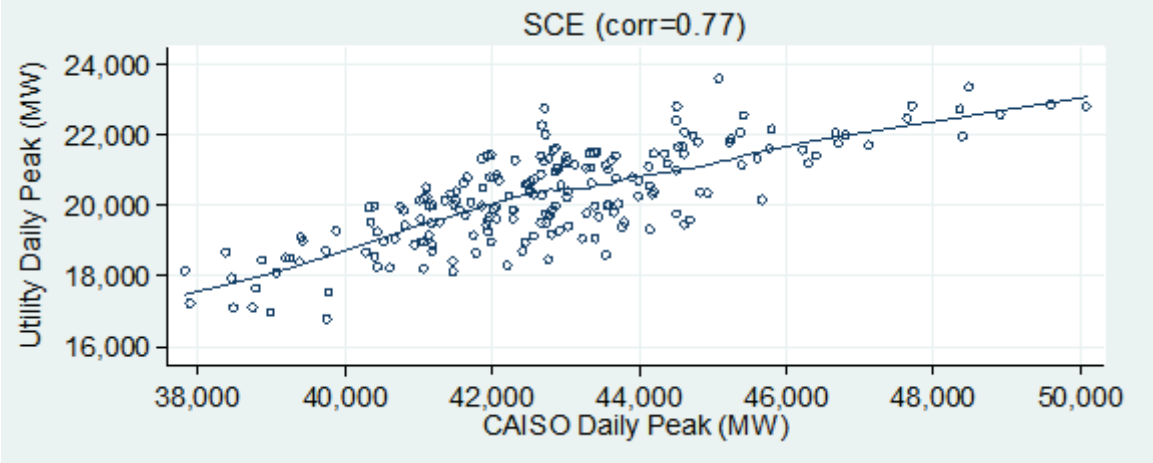
The Protocols require that ex ante load impacts be estimated assuming weather conditions associated with both normal and extreme utility operating conditions. Normal conditions are defined as those that would be expected to occur once every 2 years (1-in-2 conditions) and extreme conditions are those that would be expected to occur once every 10 years (1-in-10 conditions). From 2008 to 2013, SCE has based ex ante weather on system operating conditions specific to their own system. However, ex ante weather conditions could alternatively reflect 1-in-2 and 1-in-10 year operating conditions for the California Independent System Operator (CAISO) rather than the operating conditions for SCE. While the Protocols are silent on this issue, a letter from the CPUC Energy Division to the three California electric investor-owned utilities dated October 21, 2014 directed them to provide impact estimates under two sets of operating conditions starting with the April 1, 2015 filings: one reflecting operating conditions for each utility and one reflecting operating conditions for the CAISO system.

In order to meet this new requirement, the utilities developed ex ante weather conditions based on the peaking conditions for each utility and for the CAISO system. The previous ex ante weather conditions for each utility were developed in 2009 and were updated along with the development of the new CAISO-based conditions. Both sets of estimates used a common methodology, which was documented in a report delivered to the utilities.[3]

[3] See *Statewide Demand Response Ex Ante Weather Conditions*. Nexant, Inc. January 30, 2015.

The extent to which utility-specific ex ante weather conditions differ from CAISO ex ante weather conditions is related to the correlation between individual utility and CAISO peak loads. Figure 3-2 shows the correlations between SCE peaks and CAISO system wide daily peaks. Because the focus is on peaking conditions, the graph includes the 25 days with the highest CAISO loads in each year from 2006–2013 (25 days per year for 8 years, providing 200 observations per utility).

Figure 3-2: Relationship between CAISO and SCE Peak Loads
CAISO Top 25 Peak Days per Year (2006–2013)



SCE peak loads are more closely related to CAISO peak loads than are PG&E or SDG&E peak loads. Part of the explanation is simply that SCE constitutes a larger share of CAISO load than do the other two utilities, and therefore SCE has more influence on the overall CAISO loads. However, there are additional reasons for the differences. PG&E's northern California service territory experiences different weather systems and is more likely to peak earlier in the year than the overall CAISO system. SDG&E weekday loads and weather patterns are also unique. A larger share of SDG&E's load is residential and less of it is industrial. Temperatures peak earlier in the day than load does at SDG&E and the diurnal swing between overnight and peak temperatures is smaller.

While IOU and CAISO loads do not peak at the same time all the time, the relationship between CAISO loads and utility peaking conditions has been weakest when CAISO loads have been below 45,000 MW. For example, CAISO loads often reach 43,000 MW when Southern California loads are extreme but Northern California loads are moderate (or vice-versa). However, whenever CAISO loads have exceeded 45,000 MW, loads typically have been high across all three IOUs.

Table 3-1 shows the values for each weather scenario, weather year, and month for a variable equal to the average temperature from midnight to 5 PM (referred to as *mean17*) for each day type. For the typical event day, the CAISO weather is hotter on average than the utility-specific weather for SCE for 1-in-2 and is nearly equal under 1-in-10 year weather conditions.

Table 3-1: SCE Sales-weighted Ex Ante Weather Values (mean17) on Monthly Peak Days

Month	1-in-2		1-in-10	
	Utility-specific	CAISO	Utility-specific	CAISO
5	69.4	68	77.7	76.3
6	71.8	72.7	76.3	76.9
7	75.5	78.8	79.8	79.1
8	79.2	78.4	81.5	80.8
9	75.5	77.9	82	82.5
10	74.2	70.6	76.7	76.9
Avg. (May-Oct)	74.3	74.4	79	78.7

3.2 Overview of Evaluation Methods

The methods used to estimate ex post and ex ante load impacts for each of the DR programs in the SCE portfolio are conceptually similar. Nearly all of the 2016 evaluations relied on, or partially relied on, regression analysis to estimate a model reflecting the relationship between customer whole-premise or end-use load and key determinants of the variation in energy use over time, such as weather and time-of-day, day-of-week, and seasonal patterns that reflect the normal pattern of business or household operations. In some cases, a matched control group was used to estimate reference load for the purpose of deriving load impacts. For those, load is not modeled as a function of weather and time-of-day for the purpose of determining reference load; rather, reference load for the treatment group is simply the observed load of the control group, minus the small difference between treatment and control loads observed on nonevent days. Nevertheless, reference load models are still required even in this setting for the purpose of ex ante load impact estimation. The exception in 2016 is the PLS evaluation, which had a single installed project at the time of the evaluation. The PLS evaluation primarily relies on building simulation modeling to develop ex ante load impacts given further assumptions about the timing, geographic location, project size, and budget for the program across the ex ante forecast horizon.

Regression models are based on historical hourly or sub-hourly electricity use data for customers who have participated in the DR programs. Each model or set of models is used to estimate the reference load for an average customer enrolled in a program, which represents what customers would be expected to use in the absence of an event on days in which program events either were called (for ex post impact estimation) or have a high probability of being called (for ex ante impact estimation). For RTP, the methods were slightly different. RTP

reference loads represent what the average customer would use on a specific day if they faced the otherwise applicable tariff, TOU-8, rather than the RTP tariff.

In most instances, ex post load impacts were estimated by comparing the reference level energy use in each hour with the estimated load with DR in the hour on each event day. For ex ante estimation, predicted energy use in each hour was estimated under the assumption that an event occurred and also under the assumption that it did not occur, while everything else (e.g., weather, day-of-week effects) was held constant at values representative of a typical event day or monthly system peak day.

At a more technical level, three general approaches were used to estimate the regression models:

- **Individual Customer Time Series Regressions:** This method works well for event-based programs with numerous events and for programs with substantial variation in the drivers of load response or load shifting. This approach is also useful for programs with substantial differences in the magnitude and load patterns of customers, which is more typical among large customers. The coefficients vary at the customer level. The regressions do not necessarily explain individual customer behavior perfectly, but on aggregate they explain most of the program level variation in loads. Importantly, individual customer regressions can be employed to describe the distribution of customer load reductions as well as the distribution of percent load reductions. They can also be used to describe impacts for segments of the participant population. The key limitation to individual customer regressions is that they have no control group, and therefore they have limited ability to account for non-observable variations.
- **Aggregate Time Series Regressions:** Similar to the individual customer regression approach, but rather than estimating reference loads and load impacts for individual customers, estimates are made for groups of customers taken in aggregate.
- **Panel Regressions:** This method is particularly suitable when control groups are available, or sample sizes are sufficient for the territory, but inadequate for smaller segments such as local capacity areas. A key strength of panel regressions is the ability to control for certain omitted or unobservable variables.[4] While panel regressions can increase the accuracy of impact estimates for the average customer, they cannot be employed to describe the distribution of impacts among the participant population. Importantly, panel regressions cannot control for customer characteristics that interact with occupancy and or weather unless those variables are explicitly included.

The regression models used to predict the reference load were developed with the primary goal of accurately predicting average customer load given the time of day, day of week, temperature, and location of each customer and predicting load reductions under different temperature conditions. The focus was on the accuracy of the prediction and the validity of load impact

[4] Panel regressions can account for omitted variables that are unique to customers and relatively time invariant over the analysis time frame (fixed effects) such as household income. Panel regressions can also account for omitted variables that are common across the participant population but unique to specific time periods (time effects). They cannot, however, account for omitted variables that vary both by participant and by time period or for household characteristics (e.g., central air conditioning) that interact with variables that vary over time, such as weather and occupancy.

estimates. The regression equations used to model load patterns and estimate load impacts for each program are detailed in Appendix B.

3.3 Program-specific Analysis Methods

Table 3-2 summarizes the analysis methodology for each program. It describes the general approach used for load impact estimation and details key assumptions required in the analysis. The specific methodology chosen for each program was based on the available data, event dispatch patterns, and the strengths and weakness of each available analysis approach.

Table 3-2: Summary of Analysis Methodologies by Program

Program	Method	Evaluation Description	Key Assumptions
Base Interruptible Program (BIP-15 and BIP-30)	Regression models - individual customer	Ex post hourly load impacts were estimated using regression equations applied to customer-level hourly load data. Ex ante impacts were estimated as the reference load under 1-in-2 and 1-in-10 system peak conditions minus the firm service level, with adjustments based on historical over- or under-performance.	▪ Customers will continue to perform relative to their FSL in the future as they have in the past ▪ Enrollment growth is expected to slightly decline until 2022 and hold steady throughout the remainder of the forecast horizon.
Agricultural Pumping Interruptible Program (AP-I)	Regression models - individual customer	Agricultural pump loads were modeled as a function of time of day, day of week, temperature, and other factors. Estimates of switch activation success rates were developed based on the 10/19/16 event and applied to reference loads in the ex ante analysis.	▪ Pump loads are fully shut down when switch activation is successful. ▪ Switch activation success rates are assumed to improve through 2020 due to an effort to identify and fix communication and switch failures. ▪ A small decrease in enrollment is expected through 2022, and enrollment will hold steady thereafter.
Summer Discount Plan - Commercial (SDP-C)	Statistically-matched control group	Propensity score matching was used to select a control group. A difference-in-differences approach was used by subtracting the difference between treatment and control customers on hot nonevent days from the difference between the groups on event days. A same-day adjustment was also applied to the reference load based on the treatment group's load during the four hours prior to the event.	▪ Ex ante estimates assume that participants' characteristics such as CAC tonnage and SEER rating do not change. ▪ Changes in program enrollment will reflect the current distribution of SDP customers. ▪ Enrollment is expected to decline by about 60% by 2027 as SCE prepares to launch a new direct load control program.

Program	Method	Evaluation Description	Key Assumptions
Summer Discount Plan - Residential (SDP-R)	Statistically-matched control group	Propensity score matching was used to select a control group. A difference-in-differences approach was used by subtracting the difference between treatment and control customers on hot nonevent days from the difference between the groups on event days. A same-day adjustment was also applied to the reference load based on the treatment group's load during the four hours prior to the event.	▪ Changes in program enrollment will reflect the current distribution of SDP customers. ▪ Ex ante estimates assume that participants' characteristics such as CAC tonnage and SEER rating do not change. ▪ Enrollment is expected to decline by about 40% between 2017 and 2027 as SCE prepares to launch a new direct load control program.
Critical Peak Pricing (CPP)	Statistically-matched control group and individual customer regressions	Ex post load impacts are estimated using load data for CPP customers and a statistically matched control group of non-CPP customers; individual customer regressions were used for certain customer groups for whom the matched control group approach was not possible. Ex ante load impacts were estimated by modeling reference load and percentage load impacts a function of weather for persistent CPP customers (customers who participated in CPP in both 2015 and 2016).	▪ Future load impacts will have a similar relationship to weather as observed 2016. ▪ CPP-L participation will grow slowly; CPP-M and CPP-S will grow many-fold in 2020 , resulting in 100,000 more customers enrolled on the rate by 2027.
Demand Bidding Program (DBP)	Regression models - individual customer	Ex post hourly load impacts were estimated using regression equations applied to customer-level hourly load data. Ex ante load impacts were estimated using percentage load impacts directly calculated from 2014-2016 ex post results and applied to 1-in-2 and 1-in-10 weather reference loads.	▪ Future bidding behavior will be similar to current bidding behavior; future load impacts for each customer will be similar to historical performance in 2014, 2015, and 2016. ▪ The program will be terminated at the end of 2017.

Program	Method	Evaluation Description	Key Assumptions
Capacity Bidding Program (CBP-DA and CPB-DO)	Regression models - individual customer	Ex post hourly load impacts were estimated using regression equations applied to customer-level hourly load data. Ex ante load impacts were estimated using percentage load impacts directly calculated from 2016 ex post results (for each customer enrolled in the program at the end of the 2016 cycle) and applied to 1-in-2 and 1-in-10 weather reference loads.	▪ Future load impacts for each customer will be similar to historical performance in 2016. ▪ Customer mix at SCE will be similar to that of the 2016 participants. ▪ CBP-DA enrollment will triple by 2018; CBP-DO will grow by more than 50% in 2018; no growth predicted 2018 to 2027.
Aggregator-managed Portfolios (AMP)	Regression models - individual customer	Ex post hourly load impacts were estimated using regression equations applied to customer-level hourly load data. Ex ante load impacts were estimated using percentage load impacts directly calculated from 2016 ex post results and applied to 1-in-2 and 1-in-10 weather reference loads.	▪ Future load impacts for each customer will be similar to historical performance in 2016. ▪ Customer mix at SCE will be similar to that of the 2016 participants. ▪ Enrollment is expected to drop to 0 in 2018.
Save Power Day (SPD)	Statistically-matched control group	Ex post load impacts are estimated using load data for SPD customers and a statistically matched control group of non-SPD customers; load impacts are calculated using a difference-in-differences approach. Ex ante load impacts are estimated by modeling 2016 load impacts as a function of weather, and using the estimated model to predict load impacts for ex ante weather conditions.	▪ SPD notification program will terminate and only the direct load control program will remain, effective at the end of 2017. ▪ SPD participants currently enrolled in the PCT program are representative of future participants on the program. ▪ SPD participants with enabling technology will dramatically increase to about 130,000 customers in 2027.

Program	Method	Evaluation Description	Key Assumptions
Real-time Pricing (RTP)	Regression models - individual customer	Customer load was modeled as a function of time of day, day of week, weather (for some customers) and hourly price schedules using 2016 hourly data. The impacts were estimated as the difference between customer loads under RTP and estimated hourly loads under the otherwise applicable tariff prices based on individual customer price response.	▪ Customers will continue to respond to prices as they have in the past.
			▪ The three large customers who have been on the program for three or more years are not projected to leave RTP during the forecast horizon; customers who enroll will be similar to the average customer.
			▪ RTP enrollment is expected to be constant over the forecast horizon.
			▪ RTP will be available to TOU-8 customers; future RTP and TOU-8 rates will be similar to present rates.
Permanent Load Shifting (PLS)	Individual customer regression and building simulation modeling combined with assumptions regarding unidentified projects	Ex ante impacts were forecast for three different types of projects—operational, identified (those for which customers have completed an application) and unidentified (applications that are expected to be submitted by the end of 2022). Impacts for the operational customer were based on their individual regression model. Load impacts for identified and unidentified projects were developed using building simulation models. Impacts for identified projects were allocated to LCAs based on the expected project installation date. The allocation of impacts for unidentified projects were estimated based on key assumptions from the PLS program manager and M&E staff.	▪ The number of unidentified installations assumes that 60% of remaining incentive budget will be spent; unidentified projects are assumed to come online through 2024.
			▪ Expected size of unidentified projects is 675 kW.
			▪ It is assumed that 25% of projects that reach the application stage will drop out of the program prior to project installation.
			▪ PLS load impacts are projected to degrade by 2.5% per annum after five years in service due to expected losses in system efficiency.
			▪ Unidentified projects are distributed by LCA, proportional to the distribution of the large C&I population across LCAs.

4 Ex Post Load Impact Estimates

This section summarizes the load impacts in 2016 for event-based programs. Ex post load impacts are based on modeling electricity use patterns and load impacts over a historical period. All evaluations involve electricity usage data from program participants; for some programs, usage data from control customers who do not participate in the program is also used. Control data is used to estimate reference load for the hours prior to, during, and after DR events. In general, ex post load impacts estimate what happened based on the conditions that were in effect during the time of each event. While historical load patterns and impacts are critical for understanding the magnitude of load reduction resources, they have limitations. Because historical performance is tied to past conditions such as weather, price levels, and dispatch strategy (e.g., localized dispatches), ex post load impacts may not reflect the full option value of a DR resource. For example, a test event for a highly weather-sensitive program such as SDP-C may yield lower impacts than what the program can provide because future events might occur at hotter temperatures when air conditioning loads are higher. Likewise, resources such as CBP or AMP may be dispatched partially—one product line is called—in which case ex post events may not necessarily reflect the program load reduction capability.

4.1 Summary of 2016 Events

In 2016, SCE DR resources were dispatched based on program rules and need. The event days and event hours differed across programs and, sometimes, within programs. Table 4-1 summarizes the events called in 2016 by date and program. RTP and PLS no not appear in the table because they are not event-based programs. SDP, CBP, and SPD were dispatched most frequently of the event-based programs.

As noted earlier, several programs are dispatched strategically to address congestion in specific zones, to test load response capabilities, or for economic reasons. For CBP and AMP, different combinations of program products and/or aggregators (if applicable) were dispatched for each individual event in 2016. As a result, the impacts for individual event days are not necessarily representative of the resources available should SCE solicit demand reductions from all aggregator resources at once.

Table 4-1: Summary of 2016 SCE Demand Response Events by Date and Program

Date	AMP	AP-I	BIP	CBP-DO	CBP-DA	DBP	CPP	SDP-C	SDP-R	SPD
2/29/2016									6:00PM - 7:00PM	
10/19/2016		01:30PM - 4:30PM								
4/1/2016				06:00PM - 07:00PM						
4/6/2016				06:00PM - 07:00PM					7:00PM - 8:00PM	
5/2/2016					06:00PM- 07:00PM					
5/12/2016				06:00PM - 07:00PM	06:00PM - 07:00PM				6:00PM - 8:00PM / 7:00PM - 8:00PM	
5/26/2016	1:00 PM - 3:00 PM									
6/3/2016				03:00PM - 07:00PM / 04:00PM - 07:00PM / 05:00PM - 07:00PM / 06:00PM - 07:00PM	03:00PM- 07:00PM / 04:00PM - 07:00PM / 05:00PM - 07:00PM / 06:00PM - 07:00PM				7:00PM - 8:00PM	
6/8/2016				06:00PM - 07:00PM	06:00PM - 07:00PM					

Date	AMP	AP-I	BIP	CBP-DO	CBP-DA	DBP	CPP	SDP-C	SDP-R	SPD
6/20/2016	3:00 PM - 6:00 PM			03:00PM - 07:00PM	03:00PM - 07:00PM	12:00PM - 8:00PM	2:00PM - 6:00PM	4:00PM - 5:00PM / 4:00PM - 6:00PM / 4:00PM - 8:00PM	4:00PM - 8:00PM	2:00PM - 6:00PM
6/21/2016				03:00PM - 07:00PM / 04:00PM - 07:00PM	03:00PM - 07:00PM / 04:00PM - 07:00PM	12:00PM - 8:00PM	2:00PM - 6:00PM	4:00PM - 5:00PM	4:00PM - 5:00PM	2:00PM - 6:00PM
6/22/2016				03:00PM - 04:00PM / 03:00PM - 05:00PM	03:00PM - 04:00PM / 03:00PM - 05:00PM					
6/27/2016				03:00PM - 07:00PM / 04:00PM - 07:00PM	03:00PM - 07:00PM	12:00PM - 8:00PM	2:00PM - 6:00PM	4:00PM - 5:00PM / 6:00PM - 8:00PM / 4:00PM - 8:00PM	4:00PM - 5:00PM / 4:00PM - 8:00PM / 6:00PM - 8:00PM	2:00PM - 6:00PM
6/28/2016				05:00PM - 06:00PM	03:00PM - 07:00PM / 04:00PM - 07:00PM	12:00PM - 8:00PM	2:00PM - 6:00PM			2:00PM - 6:00PM
6/29/2016										2:00PM - 6:00PM
6/30/2016	2:00 PM - 4:00 PM			05:00PM - 06:00PM	05:00PM - 06:00PM					
7/12/2016				02:00PM - 03:00PM	02:00PM - 03:00PM					

Date	AMP	AP-I	BIP	CBP-DO	CBP-DA	DBP	CPP	SDP-C	SDP-R	SPD
7/13/2016				01:00PM - 03:00PM / 02:00PM - 03:00PM	01:00PM - 03:00PM / 02:00PM - 03:00PM					
7/14/2016				04:00PM - 07:00PM / 06:00PM - 07:00PM	04:00PM - 07:00PM / 06:00PM - 07:00PM					
7/20/2016				04:00PM - 07:00PM	04:00PM - 07:00PM			7:00PM - 8:00PM		
7/21/2016				03:00PM - 07:00PM	03:00PM - 07:00PM		2:00PM - 6:00PM	4:00PM - 5:00PM / 6:00PM - 8:00PM / 4:00PM - 8:00PM	4:00PM - 5:00PM / 4:00PM - 8:00PM / 6:00PM - 8:00PM	
7/22/2016				03:00PM - 07:00PM / 04:00PM - 07:00PM	03:00PM - 07:00PM / 04:00PM - 07:00PM	12:00PM - 8:00PM	2:00PM - 6:00PM	4:00PM - 5:00PM / 6:00PM - 8:00PM / 4:00PM - 8:00PM / 4:00PM - 7:00PM / 7:00PM - 8:00PM	4:00PM - 5:00PM / 4:00PM - 8:00PM / 7:00PM - 8:00PM	2:00PM - 6:00PM
7/25/2016				03:00PM - 07:00PM / 04:00PM - 07:00PM	03:00PM - 07:00PM / 04:00PM - 07:00PM	12:00PM - 8:00PM	2:00PM - 6:00PM	6:00PM - 8:00PM / 7:00PM - 8:00PM	6:00PM - 8:00PM / 7:00PM - 8:00PM	2:00PM - 6:00PM
7/26/2016				04:00PM - 07:00PM / 06:00PM - 07:00PM	04:00PM - 07:00PM / 06:00PM - 07:00PM	12:00PM - 8:00PM	2:00PM - 6:00PM	6:00PM - 8:00PM / 7:00PM - 8:00PM		2:00PM - 6:00PM

Date	AMP	AP-I	BIP	CBP-DO	CBP-DA	DBP	CPP	SDP-C	SDP-R	SPD
7/27/2016				03:00PM - 07:00PM	03:00PM - 07:00PM	12:00PM - 8:00PM		4:00PM - 8:00PM	4:00PM - 8:00PM / 5:00PM - 8:00PM	2:00PM - 6:00PM
7/28/2016	4:00 PM - 5:00 PM			03:00PM - 07:00PM / 06:00PM - 07:00PM	03:00PM - 07:00PM / 06:00PM - 07:00PM	12:00PM - 8:00PM		5:00PM - 8:00PM / 6:00PM - 7:00PM	6:00PM - 8:00PM / 6:00PM - 7:00PM	2:00PM - 6:00PM
7/29/2016	4:00 PM - 5:00 PM			03:00PM - 07:00PM / 04:00PM - 06:00PM / 04:00PM - 07:00PM	03:00PM - 07:00PM / 04:00PM - 06:00PM / 04:00PM - 07:00PM	12:00PM - 8:00PM				2:00PM - 6:00PM
8/1/2016				06:00PM - 07:00PM	03:00PM - 07:00PM		2:00PM - 6:00PM			
8/2/2016				06:00PM - 07:00PM	06:00PM - 07:00PM					
8/3/2016							2:00PM - 6:00PM			
8/4/2016				06:00PM - 07:00PM	06:00PM - 07:00PM					
8/12/2016				06:00PM - 07:00PM	06:00PM - 07:00PM					
8/15/2016	1:00 PM - 2:00 PM / 3:00 PM - 6:00 PM			02:00PM - 06:00PM / 03:00PM - 07:00PM / 04:00PM - 07:00PM	04:00PM - 07:00PM	12:00PM - 8:00PM	2:00PM - 6:00PM	5:00PM - 8:00PM	6:00PM - 8:00PM	2:00PM - 6:00PM
8/16/2016				04:00PM - 07:00PM	04:00PM - 07:00PM	12:00PM - 8:00PM	2:00PM - 6:00PM	5:00PM - 8:00PM	6:00PM - 8:00PM	2:00PM - 6:00PM

Date	AMP	AP-I	BIP	CBP-DO	CBP-DA	DBP	CPP	SDP-C	SDP-R	SPD
8/17/2016				05:00PM - 07:00PM / 06:00PM - 07:00PM	05:00PM - 07:00PM / 06:00PM - 07:00PM	12:00PM - 8:00PM		3:12PM - 5:40PM	3:10PM - 5:40PM	2:00PM - 6:00PM
8/18/2016				04:00PM - 07:00PM / 05:00PM - 07:00PM	04:00PM - 07:00PM / 05:00PM - 07:00PM			6:00PM - 7:00PM		
8/19/2016				06:00PM - 07:00PM	06:00PM - 07:00PM					
8/30/2016				06:00PM - 07:00PM	06:00PM - 07:00PM					
8/31/2016	5:00 PM - 7:00 PM			04:00PM - 07:00PM	04:00PM - 07:00PM					
9/7/2016				06:00PM - 07:00PM	06:00PM - 07:00PM					
9/26/2016	3:00 PM - 5:00 PM / 3:00 PM - 6:00 PM			04:00PM - 07:00PM	06:00PM - 07:00PM			6:00PM - 8:00PM	6:00PM - 8:00PM	
9/27/2016				05:00PM - 07:00PM	05:00PM - 07:00PM					
9/28/2016				06:00PM - 07:00PM	06:00PM - 07:00PM					
10/6/2016				06:00PM - 07:00PM	06:00PM - 07:00PM			7:00PM - 8:00PM	7:00PM - 8:00PM	
10/7/2016				05:00PM - 07:00PM / 06:00PM - 07:00PM	05:00PM - 07:00PM / 06:00PM - 07:00PM			7:00PM - 8:00PM	7:00PM - 8:00PM	

Date	AMP	AP-I	BIP	CBP-DO	CBP-DA	DBP	CPP	SDP-C	SDP-R	SPD
10/10/2016				06:00PM - 07:00PM	06:00PM - 07:00PM					
10/17/2016				06:00PM - 07:00PM	06:00PM - 07:00PM					
10/18/2016				06:00PM - 07:00PM	06:00PM - 07:00PM					
10/19/2016		1:30PM - 4:30PM	12:55PM - 4:00PM	05:00PM - 07:00PM / 06:00PM - 07:00PM	05:00PM - 07:00PM / 06:00PM - 07:00PM					
10/20/2016				05:00PM - 07:00PM	05:00PM - 07:00PM					
10/21/2016				05:00PM - 07:00PM / 06:00PM - 07:00PM	05:00PM - 07:00PM / 06:00PM - 07:00PM					
10/24/2016				06:00PM - 07:00PM	06:00PM - 07:00PM					
10/25/2016				06:00PM - 07:00PM	06:00PM - 07:00PM					
10/26/2016				06:00PM - 07:00PM	06:00PM - 07:00PM					
10/27/2016				05:00PM - 07:00PM / 06:00PM - 07:00PM	05:00PM - 07:00PM / 06:00PM - 07:00PM					
10/31/2016	2:00 PM - 4:00 PM				06:00PM - 07:00PM					

Date	AMP	AP-I	BIP	CBP-DO	CBP-DA	DBP	CPP	SDP-C	SDP-R	SPD
11/7/2016				05:00PM - 07:00PM / 06:00PM - 07:00PM						
11/8/2016				04:00PM - 07:00PM / 06:00PM - 07:00PM						
11/9/2016				04:00PM - 07:00PM / 05:00PM - 07:00PM / 06:00PM - 07:00PM						
11/10/2016				04:00PM - 07:00PM / 05:00PM - 06:00PM / 05:00PM - 07:00PM						

Interpreting the average event impact across events can be difficult because multiple factors can vary across event days, including temperature, the normal pattern of energy use, enrollment, the number of customers called, dispatch strategy, and number of event hours. For programs such as large customer DBP and CPP with stable participation, fixed event windows, less weather-sensitive customers, and universal dispatch for all events, the average event impacts can provide meaningful and insightful data about program performance. However, for resources that do not have those characteristics, the average event impacts provide limited insight and can be misleading. In short, ex post load impacts may not reflect the full option value of a DR resource and should be interpreted with caution. In the case of CBP and AMP, not only was a subset of customers called for each event, but the customers called for each event were not necessarily representative of the overall program.

Table 4-2 summarizes the average event impacts across all events for each of SCE's programs that had an event in 2016. A total row at the bottom is not provided because these are different types of programs that were dispatched at different times in 2016, as shown in Table 4-1.

Table 4-2: 2016 Ex Post Load Impacts for the Average Event by Event-based Program

Program	Reference Load (kW)	Load with DR (kW)	Load Impact per Customer (kW)	% Load Impact	Aggregate Impact (MW)	Accounts Called	Number of Events
AP-I	33	4	29	88%	35	1,192	1
BIP 15-minute	3,112	263	2,849	92%	165	58	1
BIP 30-minute	1,175	309	867	74%	461	532	1
SDP-C	17	15	2	10%	6	3,384	30
SDP-R	3	2	1	31%	83	105,236	26
CPP-Large	234	220	14	6%	34	2,545	12
DBP	904	772	132	15%	101	765	13
CBP-DA*							
CBP-DO*							
AMP	239	181	58	24%	92	1,571	7
SPD without Tech.	2	2	0	4%	25	324,681	14
SPD with PCT	2	2	1	34%	2.08	2,682	12

*Redacted to protect confidential customer information

5 Ex Ante Load Impacts

The portfolio ex ante load impact estimates summarize the load reduction that can be expected from all of SCE's DR programs if they are called simultaneously. They are based on a common event window and the weather conditions underlying 1-in-2 and 1-in-10 monthly system peak days. The weather conditions further vary according to whether or not the program is assumed to be called on a SCE monthly system peak day or a CAISO monthly system peak day. The ex ante estimates provide a projection of the resources available under conditions that are linked to the need for investment in additional capacity. The load impact estimates for each program align with the peak period used for resource adequacy planning, 1 to 6 PM in April through October and 4 to 9 PM in November through March.

Portfolio-adjusted load reductions reflect the assignment of load impacts from dually enrolled accounts to a single program in order to avoid double counting impacts. Dual participation is allowed for many of SCE's DR programs. The largest overlaps in the nonresidential programs (which can exceed 30% or even 40% of program enrollment) occur among DBP participants who dually enroll in either BIP or AMP in addition to AMP customers who dually enroll in CBP. There is also significant amount of dual enrollment between the residential programs, SPD and SDP-R; more than 20% of SPD participants dually enroll in SDP-R. The load impacts of customers enrolled in both an emergency program and a price-responsive program are attributed to the emergency response program for portfolio-adjusted reporting.

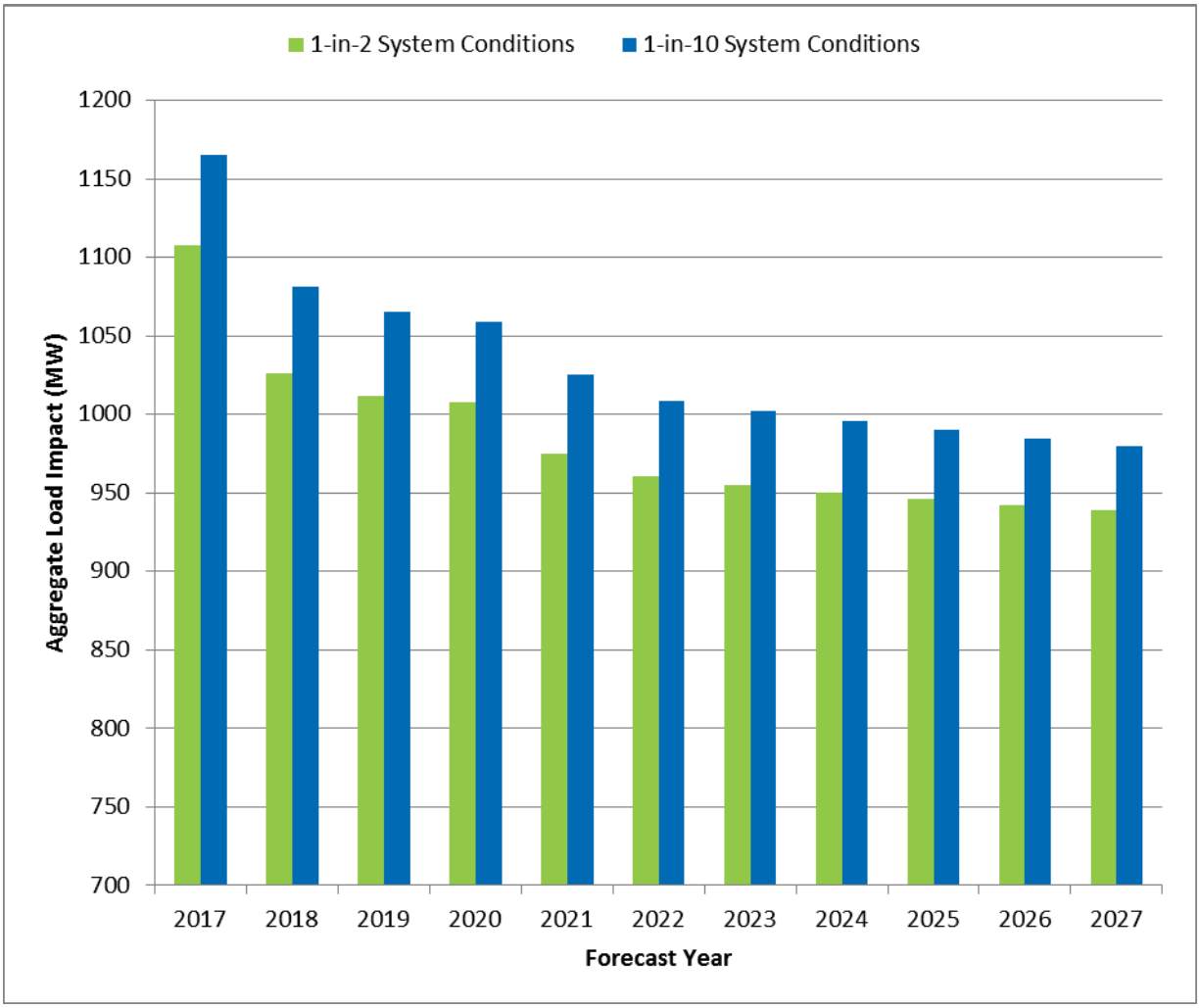
The remainder of this section summarizes the ex ante load impact estimates for SCE's portfolio of DR programs. The discussion focuses on high-level portfolio aggregate impacts by forecast year, month, and program type and assumes SCE-specific monthly peaking conditions. The remainder of the portfolio-adjusted and program-specific estimates that are required to be included in this executive summary by the Protocols can be found in Appendices C through J. Appendices C through F present ex ante load impacts assuming SCE-specific peaking conditions while Appendices G through J present ex ante load impacts assuming CAISO peaking conditions.

5.1 Projected Change in Portfolio Load Impacts from 2017–2027

Figure 5-1 presents the portfolio-adjusted aggregate load impact estimates for the August system peak day under 1-in-2 and 1-in-10 SCE-specific system conditions by forecast year. The estimated aggregate load reduction is highest in 2017 and declines every year through the end of the forecast horizon in 2027. Under 1-in-2 system conditions, SCE's DR portfolio is projected to fall 15%, from 1,104[5] MW in 2017 to 940 MW in 2027. Under 1-in-10 system conditions, SCE's DR portfolio is expected to deliver 1,161* MW for the 1-in-10 August system peak day in 2017, declining 16% to 980 MW by 2027.

[5] 2017 load impacts for Permanent Load Shifting (PLS) are not included in this sum, since they are confidential.

Figure 5-1: Portfolio Aggregate Ex Ante Load Impact Estimates (MW) for the August System Peak Day by 1-in-2 and 1-in-10 SCE-specific System Conditions and Year

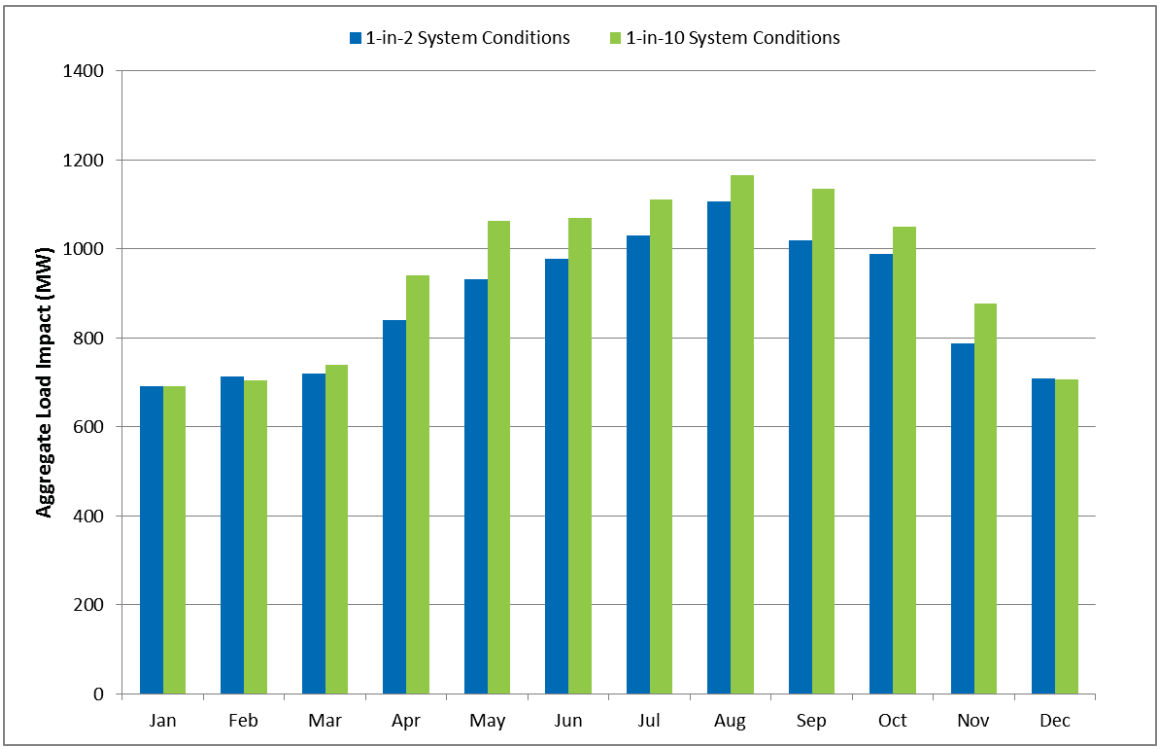


5.2 2017 Portfolio Aggregate Load Impacts by Month

Figure 5-2 shows how the 2017 portfolio load impacts vary by month under 1-in-2 and 1-in-10 SCE-specific system conditions. In 2017, SCE's DR portfolio is projected to be capable of delivering up to 1,161* MW of load reduction during the August monthly system peak day under 1-in-10 system conditions. The July and September load impacts under 1-in-10 system conditions are similar, at 1,107* and 1,131* MW, respectively. The portfolio load impacts during non-summer months are substantially lower, largely due to the fact that SDP-C and SDP-R only provide load impacts during the summer months when cooling loads are available for curtailment.

*2017 load impacts for Permanent Load Shifting (PLS) are not included in this sum, since they are confidential.

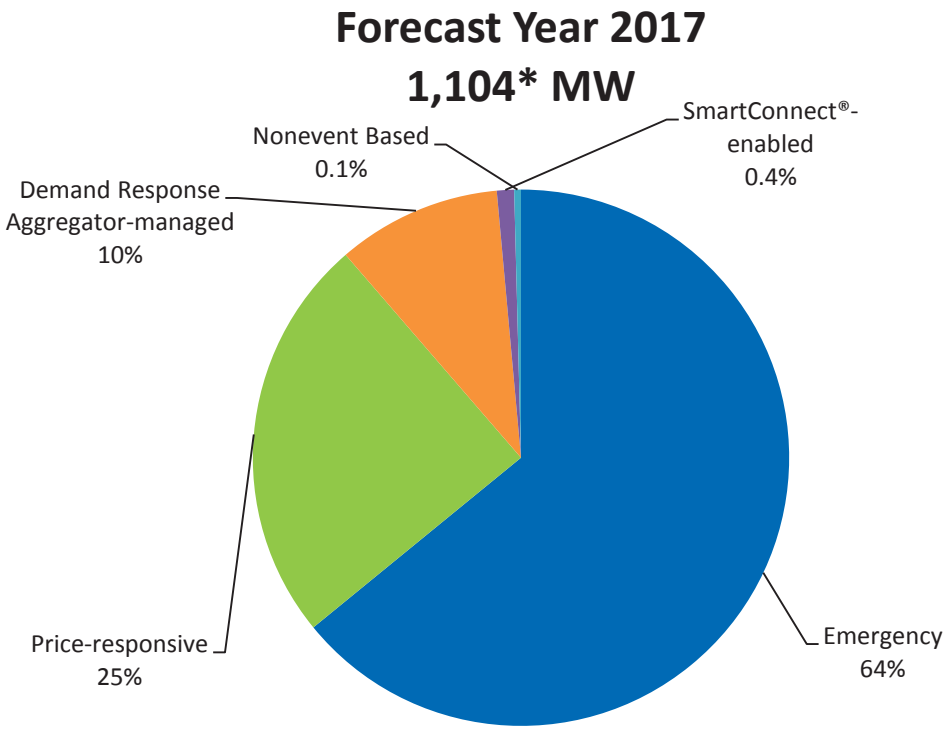
Figure 5-2: 2017 Portfolio Aggregate Ex Ante Load Impact Estimates (MW) by 1-in-2 and 1-in-10 SCE-specific System Conditions and Monthly System Peak Day



5.3 Portfolio Load Impacts by Program Type

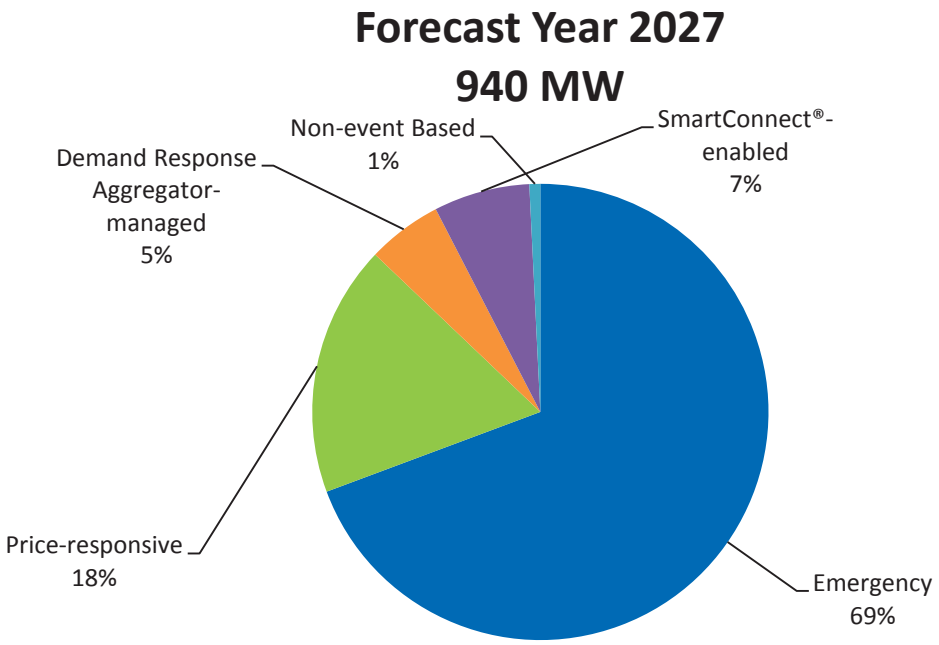
SCE has moved in recent years towards a more balanced DR portfolio by program type with fewer emergency response resources. Figure 5-3 shows the distribution of portfolio aggregate load impacts by program type in 2017. Load impacts from emergency response programs are forecast to comprise 64% of SCE's DR portfolio during this period. Most of the remaining load impacts are forecast to come from aggregator-managed programs (10%) and price-responsive programs (25%). Figure 5-4 shows the distribution of portfolio aggregate load impacts by program type for the year 2027. A greater percentage of load impacts are projected to come from SmartConnect-enabled and emergency programs by 2027, with a smaller share of load impacts expected to be delivered by aggregator-managed and price-responsive programs.

Figure 5-3: Distribution of Portfolio Aggregate Load Impacts by Program Type 2017 August System Peak Day under 1-in-2 SCE-specific System Conditions



*2017 load impacts for Permanent Load Shifting (PLS) are not included in this sum, since they are confidential.

Figure 5-4: Distribution of Portfolio Aggregate Load Impacts by Program Type 2027 August System Peak Day under 1-in-2 SCE-specific System Conditions



5.4 Portfolio Load Impacts by Program

Table 5-1 summarizes the portfolio load impacts by program by month for 2017 through 2027 under 1-in-2 system peak conditions. As indicated in the above discussion of Figure 5-1, load impacts from SCE's DR portfolio are projected to fall by 15% from 2017 to 2027.

Tables 5-2 and 5-3 show the monthly variation in portfolio aggregate load impacts in 2017 for 1-in-2 and 1-in-10 SCE-specific system peaking conditions. Similar tables are presented in Appendices C through F for each forecast year from 2017 through 2027, for 1-in-2 and 1-in-10 SCE-specific system conditions and for both portfolio-adjusted and program-specific assumptions. Appendices G through J present the same tables but under 1-in-2 and 1-in-10 CAISO peaking conditions.

Table 5-1: Portfolio Aggregate Load Impact Estimates (MW) for the August System Peak Day Under 1-in-2 SCE-specific System Conditions by Program and Forecast Year

Program Type	Program	Forecast Year										
		2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Emergency	BIP-15	149	148	147	145	140	140	140	140	140	140	140
	BIP-30	511	501	489	479	470	462	462	462	462	462	462
	AP-I	50	50	51	50	50	49	49	49	49	49	49
	SUB-TOTAL	**710**	**699**	**686**	**675**	**660**	**650**	**650**	**650**	**650**	**650**	**651**
Price-responsive	SDP-C	36	34	31	29	26	24	22	20	19	17	16
	SDP-R	213	202	192	183	174	165	157	149	141	134	127
	CPP-Large	17	17	17	17	17	17	17	17	17	17	17
	CPP-Medium	0	0	4	11	4	4	4	4	4	4	4
	CPP-Small	0	0	1	8	3	3	3	3	3	3	3
	DBP	6	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**272**	**253**	**245**	**247**	**224**	**213**	**203**	**193**	**184**	**175**	**167**
Demand Response Aggregator-managed	CBP-DA	2	5	5	5	5	5	5	5	5	5	5
	CBP-DO	29	45	45	45	45	45	45	45	45	45	45
	AMP	79	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**110**	**50**	**50**	**50**	**50**	**50**	**50**	**50**	**50**	**50**	**50**
SmartConnect®-enabled	SPD with Tech.	11	19	24	29	34	39	44	49	54	59	64
	SUB-TOTAL	**11**	**19**	**24**	**29**	**34**	**39**	**44**	**49**	**54**	**59**	**64**
Non-event Based	RTP	1	1	1	1	1	1	1	1	1	1	1
	PLS	0*	4	6	6	6	7	7	7	7	7	7
	SUB-TOTAL	**1**	**5**	**7**	**7**	**7**	**8**	**8**	**8**	**8**	**8**	**8**
PORTFOLIO TOTAL		**1,104**	**1,026**	**1,012**	**1,008**	**975**	**960**	**955**	**950**	**946**	**942**	**940**

*Load impacts are redacted to protect confidential customer information

Table 5-2: 2017 Portfolio Aggregate Ex Ante Load Impact Estimates for SCE-specific 1-in-2 System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	109	121	129	120	136	147	148	149	149	150	142	123
	BIP-30	432	437	433	469	502	490	489	511	486	500	453	433
	AP-I	22	25	31	43	49	53	52	50	40	37	28	26
	SUB-TOTAL	**563**	**583**	**593**	**631**	**687**	**691**	**689**	**710**	**675**	**687**	**623**	**581**
Price-responsive	SDP-C	9	10	10	21	23	25	29	36	32	30	15	8
	SDP-R	0	0	0	53	86	122	171	213	164	123	28	0
	CPP-Large	8	8	8	17	17	17	16	17	17	18	8	8
	CPP-Medium	0	0	0	0	0	0	0	0	0	0	0	0
	CPP-Small	0	0	0	0	0	0	0	0	0	0	0	0
	DBP	3	3	3	3	5	6	6	6	6	6	4	3
	SUB-TOTAL	**20**	**21**	**21**	**93**	**132**	**170**	**222**	**272**	**219**	**177**	**55**	**19**
Demand Response Aggregator-managed	CBP-DA	1	1	1	1	1	1	2	2	2	2	1	1
	CBP-DO	24	25	24	26	23	28	28	29	33	32	24	23
	AMP	82	82	82	82	80	78	77	79	77	77	83	83
	SUB-TOTAL	**107**	**108**	**107**	**109**	**104**	**107**	**107**	**110**	**112**	**111**	**108**	**108**
SmartConnect®-enabled	SPD with Tech.	0	0	-1	6	7	8	10	11	10	10	0	1
	SUB-TOTAL	**0**	**0**	**-1**	**6**	**7**	**8**	**10**	**11**	**10**	**10**	**0**	**1**
Nonevent Based	RTP	0	0	0	0	0	-1	-1	1	-1	0	0	0
	PLS	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*
	SUB-TOTAL	**0**	**0**	**0**	**0**	**0**	**-1**	**-1**	**1**	**-1**	**0**	**0**	**0**
PORTFOLIO TOTAL		**690**	**713**	**720**	**840**	**929**	**974**	**1,026**	**1,104**	**1,016**	**985**	**787**	**708**

*Load impacts are redacted to protect confidential customer information

Table 5-3: 2017 Portfolio Aggregate Ex Ante Load Impact Estimates for SCE-specific 1-in-10 System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	106	117	132	123	137	147	149	149	149	149	143	121
	BIP-30	435	433	434	473	515	506	495	518	499	506	460	435
	AP-I	24	25	34	48	54	55	53	53	43	42	33	25
	SUB-TOTAL	**565**	**575**	**600**	**645**	**706**	**708**	**697**	**720**	**691**	**697**	**636**	**581**
Price-responsive	SDP-C	7	9	14	29	34	32	35	40	41	34	20	7
	SDP-R	0	0	6	126	183	189	231	256	245	168	97	0
	CPP-Large	8	8	8	18	17	16	15	16	17	18	9	8
	CPP-Medium	0	0	0	0	0	0	0	0	0	0	0	0
	CPP-Small	0	0	0	0	0	0	0	0	0	0	0	0
	DBP	3	3	3	4	6	6	6	6	6	6	4	3
	SUB-TOTAL	**18**	**20**	**32**	**177**	**241**	**243**	**288**	**318**	**310**	**226**	**130**	**18**
Demand Response Aggregator-managed	CBP-DA	1	1	1	1	1	1	2	2	2	2	1	1
	CBP-DO	24	25	25	26	23	28	28	29	33	32	24	23
	AMP	83	82	82	82	80	78	77	79	77	77	83	83
	SUB-TOTAL	**108**	**108**	**109**	**109**	**104**	**107**	**107**	**110**	**112**	**111**	**108**	**108**
SmartConnect®-enabled	SPD with Tech.	1	1	0	8	10	10	11	12	13	11	1	1
	SUB-TOTAL	**1**	**1**	**0**	**8**	**10**	**10**	**11**	**12**	**13**	**11**	**1**	**1**
Nonevent Based	RTP	0	0	0	2	0	-1	4	1	6	2	1	0
	PLS	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*
	SUB-TOTAL	**0**	**0**	**0**	**2**	**0**	**-1**	**4**	**1**	**6**	**2**	**1**	**0**
PORTFOLIO TOTAL		**692**	**705**	**740**	**940**	**1,060**	**1,065**	**1,107**	**1,161**	**1,131**	**1,047**	**877**	**708**

*Load impacts are redacted to protect confidential customer information

6 Recommendations

The 2016 DR program evaluations contain recommendations for each program. The recommendations provide steps to improve the measurement and evaluation of DR resources and to improve program performance. This section summarizes the recommendations for each program.

6.1 Emergency Programs

Overall, emergency programs are infrequently used, but substantial load reductions are linked to both automated control technology and contractual agreements with substantial penalties for nonperformance. Their importance and infrequent dispatch make it critical to understand the electricity use patterns of participants, call test events, and measure the extent to which communications work well. The following summarizes the recommendations for the emergency programs:

- **Continue to call at least one BIP event each year**, especially in light of the fact that the mix of customers on the program can and does change from year to year. When calling a test event, consider the event conditions that are being simulated. If a BIP test event is meant to simulate a generation supply shortage, give at least one day notice, but not the exact timing of the event. If a BIP test event is meant to simulate a transmission or distribution outage, day-ahead notice is not appropriate.
- **Improve the AP-I switch success rate.** This is an iterative process that will take several years and require continuous adjustment to meet stated goals. Improvement requires the following steps:
    1. **Run tests or actual events during the summer, when pumps are on.** Ideally, the test event would occur during peak hours and last long enough to determine whether pumps that were operating immediately before the event ramped down when the event signal was sent to the switches. Calling events facilitates the ability to identify pumps that are not providing load reduction and improve the switch success rates to work toward SCE's goal of improving AP-I switch success rates to 93%.
    2. **Analyze the 15-minute interval data to identify units that were on immediately prior to the event but were not activated.** The criteria for determining activation must take into account that some pumps ramp down over five minutes and that additional loads not controlled by switches are measured by the same meter for a small fraction of participants.
    3. **Target the identified accounts for a switch activation inspection and repair, as appropriate.**

6.2 Price-responsive Programs

Price responsive programs are dispatched more frequently based on economic criteria rather than solely for emergency conditions. The following recommendations were made for price response programs:

- Consider the flexibility of the SDP in assessing the value of the program. Ex ante load impacts for 1 to 6 PM may not reflect the overall value of the program, which can be dispatched locally and can meet the need for system resources during the late afternoon and early hours.

- When choosing the dates for SDP-C events, factor in the school calendar, since schools can deliver a large fraction of SDP-C's potential impact.

6.3 Aggregator-managed Programs

- Continue to offer AutoDR enrollment. It has incrementally higher impacts.
- Consider customer mix, as larger customers have higher impacts.

6.4 SmartConnect®-enabled Programs

Consider redesigning program hours for the SPD PCT program. The PCT program is dispatched from 2 to 6 PM, whereas the resource adequacy peak hours are from 1 to 6 PM. The PCTs precool during the hour before the program event, the first hour of the RA window, resulting in a significant negative load impact during the first hour of the RA window calculation. The difference in the average hourly load impact between the program event window and the RA window is 0.26 kW. This difference results in a 33% lower average hourly impact for the RA window directly attributable to the timing of the program event hours relative to the RA hours.

6.5 Nonevent Based Programs

- **Recruit more large customers into RTP.** Future aggregate load impacts are closely tied to the size and price responsiveness of specific RTP participants.
- **Assess the incremental improvement of different pricing schedule selection rules for RTP.**
- **Each utility should have a process in place to collect and store post-installation operation data. Pre-installation data should be collected.** As more PLS customers come online, it may be possible to relax data collection requirements, but in this early phase it is important to have complete system data, both pre and post-installation.

Appendix A Ex Ante Weather Proxy Days

Table A-1 shows the proxy days selected for SCE-peaking conditions for monthly system peak days coincident with SCE's monthly system peaking conditions. Table A-2 presents the proxy days selected for CAISO-peaking conditions for monthly system peak days coincident with CAISO's monthly system peaking conditions.

Table A-1: SCE Proxy Days in Monthly System Peak Day Selection

Weather Year	Month											
	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
1-in-10	1/29/2002	2/8/2006	3/20/2006	4/30/1996	5/28/1997	6/5/2002	7/28/1995	8/5/1997	9/1/1998	10/7/1996	11/3/1997	12/18/2006
	1/4/2005	2/27/2007	3/12/2007	4/26/2004	5/3/2004	6/28/2006	7/16/1998	8/29/1998	9/4/2007	10/1/2008	11/7/2006	12/18/2007
	1/16/2007	2/4/2008	3/24/2008	4/28/2008	5/19/2008	6/20/2008	7/25/2006	8/31/2007	9/27/2010	10/13/2011	11/14/2007	12/17/2008
	1/23/2008	2/9/2009	3/31/2011	4/21/2009	5/13/2013	6/28/2013	7/16/2010	8/10/2012	9/5/2013	10/1/2012	11/4/2010	12/9/2013
1-in-2	1/4/1995	2/19/1997	3/15/1999	4/21/1997	5/29/2002	6/23/1995	7/12/1999	8/11/2000	9/5/1995	10/8/1999	11/12/1996	12/21/1998
	1/22/1996	2/23/2000	3/6/2000	4/27/2007	5/20/2005	6/26/2000	7/8/2002	8/10/2004	9/28/1999	10/1/2001	11/1/1999	12/10/2001
	1/26/1999	2/21/2002	3/19/2001	4/1/2011	5/7/2009	6/21/2005	7/13/2005	8/27/2009	9/12/2000	10/7/2002	11/8/2001	12/29/2004
	1/12/2009	2/15/2012	3/10/2005	4/20/2012	5/31/2012	6/29/2007	7/26/2007	8/30/2013	9/14/2012	10/24/2007	11/3/2009	12/19/2012

Table A-2: CAISO Proxy Days in Monthly System Peak Day Selection

Weather Year	Month											
	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
1-in-10	1/29/2002	2/26/1996	3/19/1997	4/30/1996	5/28/2003	6/22/2001	7/27/1995	8/5/1997	9/3/2007	10/1/2001	11/3/1997	12/18/2006
	1/15/2007	2/21/2002	3/29/2004	4/26/2004	5/3/2004	6/29/2006	7/29/1996	8/31/2007	9/3/2009	10/1/2008	11/29/2006	12/17/2007
	1/24/2008	2/27/2007	3/20/2006	4/28/2008	5/16/2008	6/20/2008	7/3/2001	8/25/2010	9/27/2010	10/1/2010	11/14/2007	12/17/2008
	1/14/2013	2/4/2008	3/12/2007	4/21/2009	5/13/2013	6/28/2013	7/24/2006	8/13/2012	9/7/2011	10/1/2012	11/4/2010	12/8/2009
1-in-2	1/11/2001	2/9/1999	3/16/1999	4/24/1995	5/30/1995	6/30/1996	7/17/1998	8/25/1999	9/4/2003	10/7/1996	11/1/1999	12/12/2000
	1/5/2004	2/23/2000	3/6/2000	4/21/1997	5/29/2002	6/29/1999	7/12/1999	8/14/2003	9/7/2004	10/16/1997	11/5/2001	12/18/2002
	1/5/2009	2/2/2004	3/3/2009	4/21/1998	5/17/2006	6/5/2002	7/16/2003	8/26/2005	9/14/2012	10/7/2004	11/19/2002	12/1/2004
	1/10/2011	2/28/2012	3/7/2013	4/29/2013	5/18/2009	6/29/2009	7/21/2005	8/28/2009	9/6/2013	10/13/2005	11/30/2011	12/13/2010

Appendix B Regression Specifications

B.1 Base Interruptible Program

Ex post:

$$kW_t = A + \sum_{i=1}^{24} B_i \times Hour_i \times BIP\_Eventday_t + \sum_{i=1}^{24} C_i \times Hour_i \times CPP\_Eventday_t + \sum_{i=1}^{24} D_i \times Hour_i \times DBP\_Eventday_t + \sum_{i=1}^{24} E_i \times Hour_i \times \text{morningload} + \sum_{i=1}^{5} F_i \times DOW_t + \sum_{i=1}^{24} G_i \times Hour_i \times \text{Monday} + \sum_{i=1}^{24} H_i \times Hour_i \times \text{Summer} + \sum_{i=1\,s}^{24} I_i \times Hour_i \times \text{Summer} \times \text{CDH\_MA3} + \sum_{i=1}^{24} J_i \times Hour_i \times \text{Winter} \times \text{CDH60} + \sum_{i=1}^{24} K_i \times Hour_i \times \text{Winter} \times \text{HDH60} + \sum_{i=1}^{24} L_i \times Hour_i \times \text{Winter} \times \text{mean17} + \sum_{i=1}^{24} M_i \times Hour_i \times \text{Friday} + \sum_{m=1}^{12} N_i \times Month_m \; if \; year == 2016$$

Variable	Description
kW_t	hourly BIP customer load at time t
A	estimated constant term
$B - O$	estimated parameters
CDD_t	cooling degree days (base 60)
CDH_t	cooling degree hours (base 60)
CDH_t	cooling degree hours (base 60) per day
HDH_t	heating degree hours (base 60) per day
$MorningLoad$	average customer load between 12 AM and 9 AM
$OvernightCDH$	total number of cooling degree hours (base 60) between 12am and 10am
$DayType_j$	series of binary variables representing five different day types (Mon., Tues.-Thurs., Fri., Sat., Sun./Holiday)
$Month_j$	series of binary variables for each month
$Hour_i$	series of binary variables for each hour, which is interacted with all of the remaining variables because each has an impact that varies by hour
CDH_{MA3_t}	moving average of 3 prior cooling degree hours (base 60)
$CPP\_Eventday_t$, $BIP\_Eventday_t$, $DBP\_Eventday_t$, $DRC\_Eventday_t$	binary variable representing each program event day if customer is also enrolled in that program
$Summer_t, Winter_t$	binary variables that indicate if month is between May and October for each hour
e_t	error term

B.2 Agricultural and Pumping Interruptible Program

$$kW_t = A + \sum_{i=1}^{24}\sum_{j=1}^{12} B_{ij} \times Hour_i \times Month_j + \sum_{i=1}^{24}\sum_{j=1}^{3} C_{ij} \times Hour_i \times DayType_j +$$
$$\sum_{i=1}^{24} D_i \times Hour_i \times TotalCDH_t + \sum_{i=1}^{24} E_i \times Hour_i \times TotalCDHsqr_t +$$
$$\sum_{i=1}^{24} F_i \times Hour_i \times TotalHDH_t + \sum_{i=1}^{24} G_i \times Hour_i \times TotalHDHsqr_t +$$
$$\sum_{i=1}^{24} H_i \times Hour_i \times Eventday + \sum_{i=1}^{12} I_i \times Month_i \times TotalCDH_t +$$
$$\sum_{i=1}^{24} J_i \times Hour_i \times MorningLoad + \varepsilon_t$$

Variable	Definition
kW_t	average hourly demand (kW) for each time period
A	estimated constant term
B_{ij} through J_i	regression model parameters
$Hour_i$	series of binary variables for each hour, which account for the basic hourly load shape of the customer after other factors such as weather and prices are accounted for
$DayType_j$	series of binary variables representing three different day types (Monday, Tuesday-Thursday, and Friday); weekends are excluded from the model
$Month_j$	series of binary variables for each month designed to reflect seasonality in loads
$TotalCDH_t$	sum of cooling degree hours (base 60) for the day
$TotalCDHsqr_t$	$TotalCDH_t$ squared
$TotalHDH_t$	sum of heating degree hours (base 60) for the day
$TotalHDHsqrt$	$TotalHDH_t$ squared
$EventDay_t$	binary variable representing an AP-I event day
$MorningLoad$	average kW between 12 AM and 12 PM for each customer and day
e_t	error term

B.3 Critical Peak Pricing

Matched control group regression:

$$kW_{i,t,h} = a * treat_i * eday_t * eperiod_h + \sum_{cust=1}^{customers} b_{cust} * customer_{cust\ i} + \sum_{hr=1}^{hours} c_{hr} * hour_{hr\ h}$$

$$+ \sum_{date=1}^{days} d_{date} * day_{date\ t} + e * eday_t * eperiod_h + f * treat_i * eperiod_h$$

$$+ g * treat_i * eday_t + u_{ith}$$

Variable	Description
kW	average demand
treat	indicates whether a customer is a participant (treat=1) or a control group member (treat =0)
eday	indicates whether a given day was an event (eday=1) or not (eday=0)
eperiod	indicates whether a given hour was an event hour (eperiod=1) or not (eperiod=0)
customer	a set of indicator variables that equal one if cust=i
hour	a set of indicator variables that equal one if hr=h
day	a set of indicator variables that equal one if date=t
a	estimated effect of the treatment
b, c, d	estimated fixed effects
e, f, g	estimated parameters
i	indexes customers
t	indexes the days
h	indexes hours

Ex post, individual event

$$kwh_{it} = a + b * mean17_{i,t} + c * mean17_{i,t}^2 + e_{i,t}$$

Variable	Description
A	a is an estimated constant
b, c, and d	b, c, and d are estimated parameters
mean17	mean temperature from midnight until 5 PM
e	error term

12 models tested:

Model #	Specification
1	$P(CPP_i) = \Phi\left(a + \sum_{h=12}^{21} b_h * kW_{hi} + e_i\right)$
2	$P(CPP_i) = \Phi\left(a + \sum_{h=12}^{21} b_h * kW_{hi} + c * Avg\ Summer\ Day\ kWh_i + e_i\right)$
3	$P(CPP_i) = \Phi\left(a + \sum_{h=12}^{21} b_h * kW_{hi} + c * Avg\ Proxy\ Day\ kWh_i + e_i\right)$
4	$P(CPP_i) = \Phi\left(a + \sum_{h=12}^{21} b_h * kW_{hi} + c * Avg\ Summer\ Day\ kWh_i + d * Proxy\ Day\ Percent\ Peak\ Usage_i + e_i\right)$
5	$P(CPP_i) = \Phi\left(a + \sum_{h=12}^{21} b_h * kW_{hi} + c * Avg\ Proxy\ Day\ kWh_i + d * Proxy\ Day\ Percent\ Peak\ Usage_i + e_i\right)$
6	$P(CPP_i) = \Phi\left(a + \sum_{h=15}^{18} b_h * kW_{hi} + e_i\right)$
7	$P(CPP_i) = \Phi\left(a + \sum_{h=15}^{18} b_h * kW_{hi} + c * Avg\ Summer\ Day\ kWh_i + e_i\right)$
8	$P(CPP_i) = \Phi\left(a + \sum_{h=15}^{18} b_h * kW_{hi} + c * Avg\ Proxy\ Day\ kWh_i + e_i\right)$

Model #	Specification
9	$$P(CPP_i) = \Phi\Big(a + \sum_{h=15}^{18} b_h * kW_{hi} + c * Avg\ Summer\ Day\ kWh_i + d * Proxy\ Day\ Percent\ Peak\ Usage_i + e_i\Big)$$
10	$$P(CPP_i) = \Phi\Big(a + \sum_{h=15}^{18} b_h * kW_{hi} + c * Avg\ Proxy\ Day\ kWh_i + d * Proxy\ Day\ Percent\ Peak\ Usage_i + e_i\Big)$$
11	$$P(CPP_i) = \Phi(a + b * Avg\ Summer\ Day\ kWh_i + c * Proxy\ Day\ Percent\ Peak\ Usage_i + e_i)$$
12	$$P(CPP_i) = \Phi(a + b * Avg\ Summer\ Day\ kWh_i + c * Proxy\ Day\ Percent\ Peak\ Usage_i + e_i)$$

Variable	Description
kW	energy usage in each hourly interval h averaged over proxy days
Avg Summer Day kWh	total energy usage for all hours in a day averaged over nonevent summer days
Avg Proxy Day kWh	total energy usage for all hours in a day averaged over proxy days
Proxy Day Percent Peak Usage	percentage of total energy occurring in peak hours averaged over proxy days

B.4 Demand Bidding Program

Ex post:

$$Q_t = a + \sum_{Evt=1}^{E}\sum_{i=1}^{24}(b_{i,Evt}^{DBP} \times h_{i,t} \times DBP_t) + \sum_{i=1}^{24}(b_i^{MornLoad} \times h_{i,t} \times MornLoad_{i,t})$$
$$+ \sum_{DR}\sum_{i=1}^{24}(b_i^{DR} \times h_{i,t} \times OtherEvt^{DR}{}_{i,t}) + \sum_{i=1}^{24}(b_i^{Weather} \times h_{i,t} \times Weather_t) + \sum_{i=2}^{24}(b_i^{MON} \times h_{i,t} \times MON_t)$$
$$+ \sum_{i=2}^{24}(b_i^{FRI} \times h_{i,t} \times FRI_t) + \sum_{i=2}^{24}(b_i^{SUMMER} \times h_{i,t} \times SUMMER_t) + \sum_{i=2}^{24}(b_i^{h} \times h_{i,t})$$
$$+ \sum_{i=2}^{5}(b_i^{DTYPE} \times DTYPE_{i,t}) + \sum_{i=6}^{10}(b_i^{MONTH} \times MONTH_{i,t}) + e_t$$

Variable	Description
Q_t	demand in hour t for a customer enrolled in DBP prior to the last event date
b's	estimated parameters
$h_{i,t}$	dummy variable for hour i
DBP_t	indicator variable for program event days
$Weather_t$	weather variables selected in the model screening process
E	number of event days that occurred during the program year
$MornLoad_t$	variable equal to the average of the day's load in hours 1 through 10
$OtherEvt_{i,t}^{DR}$	equals one on the event days of other demand response programs in which the customer is enrolled
MON_t	dummy variable for Monday
FRI_t	dummy variable for Friday
$SUMMER_t$	dummy variable for the summer pricing season[8]
$DTYPE_{i,t}$	series of dummy variables for each day of the week
$MONTH_{i,t}$	series of dummy variables for each month
e_t	error term

The ex ante model specifications used for estimating summer loads are the same as the ex post specifications, with the following exceptions:

- The $MornLoad_{i,t}$ term and the E term are not included in the ex ante model specification; and
- A cooling degree hour (base 60 °F) variable is used in the ex ante model specification rather than the $Weather_t$ term.

[8] The SCE summer pricing season is June through September.

- The ex ante model specification used for estimating non-summer loads follows, which uses the same variable naming convention as in the ex post regression model specification, with the addition of the HDH_t and HDD_t variables, heating degree hours, and heating degree days, base 60 °F.

$$Q_t = a + \sum_{Evt=1}^{E} \sum_{i=1}^{24} (b_{i,Evt}^{DBP} \times h_{i,t} \times DBP_t) + \sum_{DR} \sum_{i=1}^{24} (b_i^{DR} \times h_{i,t} \times OtherEvt^{DR}{}_{i,t})$$
$$+ \sum_{i=1}^{24} (b_i^{CDH} \times h_{i,t} \times CDH_t) + \sum_{i=1}^{24} (b_i^{CDD} \times h_{i,t} \times CDD_t) + \sum_{i=1}^{24} (b_i^{HDH} \times h_{i,t} \times HDH_t)$$
$$+ \sum_{i=1}^{24} (b_i^{HDD} \times h_{i,t} \times HDD_t) + \sum_{i=2}^{24} (b_i^{MON} \times h_{i,t} \times MON_t) + \sum_{i=2}^{24} (b_i^{FRI} \times h_{i,t} \times FRI_t) + \sum_{i=2}^{24} (b_i^{h} \times h_{i,t})$$
$$+ \sum_{i=2}^{5} (b_i^{DTYPE} \times DTYPE_{i,t}) + \sum_{i=2-5,10-12} (b_i^{MONTH} \times MONTH_{i,t}) + e_t$$

B.5 Capacity Bidding Program and Aggregator Managed Programs

Approximately 35 regression model specifications were tested for each customer, where 25 include terms that account for weather-sensitive loads and 10 do not, for customers with electric loads that are not weather-sensitive. Each of the 35 models used different combinations of the explanatory variables described in the table below. The best model was selected for each customer on the basis of out-of-sample testing, using mean absolute percent error and mean percent error as points of comparison.

Variable Name	Variable Description
$Weather_{i,d}$	weather-related variables including average daily temperature, multiple cooling degree hour (CDH) terms with base values of 75, 70, and 65 depending on service territory, and lagged versions of various weather related variables
$Month_{i,d}$	series of indicator variables for each month
$DayOfWeek_{i,d}$	series of indicator variables for each day of the week
$Year_{i,d}$	indicator for the year 2016
$OtherEvt_{i,d}$	binary variable that equals one on event days of other demand response programs in which the customer is enrolled
$MornLoad_{i,d}$	average of each day's load in hours 5 am through 10 am
$P_{i,d}$	indicator for aggregator program event days
P * $Month_{i,d}$	indicator variable for aggregator program event days interacted with the month
P * $Year_{i,d}$	indicator variable for aggregator program event days interacted with the year 2016
P*$NonTypEvent_{i,d}$	indicator variable for aggregator program event days interacted with an indicator for non-typical event windows (outside of HE 16-19)

B.6 Save Power Day

Ex ante:

$$Impact = a + b \cdot mean17 + \boldsymbol{\varepsilon}$$

Variable	Description
$Impact$	per customer ex post load impact (kW) for each event day, averaged over the event period
a	estimated constant
b	estimated parameter coefficient
$mean17$	average temperature from 12 AM to 5 PM
$\boldsymbol{\varepsilon}$	error term, assumed to be mean zero and uncorrelated with any of the independent variables

B.7 Real Time Pricing

$$kW_t = A + \sum_{i=13}^{22} B_i \times Hour_i \times Price_t + \sum_{i=13}^{22} C_i \times Hour_i \times PriceSQR_t + \sum_{i=1}^{12} D_i \times Hour_i \times PriceRatio_t + \sum_{i=23}^{24} E_i \times Hour_i \times PriceRatio_t + \sum_{i=1}^{24}\sum_{j=1}^{3} F_{ij} \times Hour_i \times DayType_j + \sum_{i=1}^{24}\sum_{j=1}^{12} G_{ij} \times Hour_i \times Month_j + e_t$$

For weather-sensitive customers, the following weather variables were also included:

$$\sum_{i=1}^{24} I_{ij} \times Hour_i \times TotalCDH_t + \sum_{i=1}^{24} J_{ij} \times Hour_i \times TotalHDH_t$$

Variable	Description
A	estimated constant
$B - J$	estimated parameter coefficients
$Hour$	indicator variables representing the hours of the day, designed to estimate the effect of daily schedules on usage behavior and event impacts
$Month$	indicator variable for the month
$Price$	RTP price in effect for each hour
$PriceSQR$	RTP price squared
$PriceRatio$	ratio between the RTP price in effect for each hour and the maximum price for the day, which captures load shifting to hours when prices are relatively low

Variable	Description
$DayType$	series of binary variables representing three different day types (Monday, Tuesday through Thursday, and Friday)
$TotalCDH$	total number of cooling degree hours (base 70) per day
$TotalHDH$	total number of heating degree hours (base 70) per day
e_t	error term

B.8 Permanent Load Shifting

$$kW_t = A + \sum_{i=1}^{24}\sum_{j=1}^{12} B_{ij} \times Hour_i \times Month_j + \sum_{i=1}^{24}\sum_{j=1}^{5} C_{ij} \times Hour_i \times DOW_j +$$
$$\sum_{i=1}^{24} D_i \times Hour_i \times CDD_t + \sum_{i=1}^{24} E_i \times Hour_i \times CDDsqr_t +$$
$$\sum_{i=1}^{24} F_i \times Hour_i \times CDH_t + \sum_{i=1}^{24} G_i \times Hour_i \times CDHsqr_t +$$
$$\sum_{i=1}^{24} H_i \times Hour_i \times Summer + \sum_{i=1}^{3} I_i \times Year_{it} +$$
$$J_i \times PLS_t + \varepsilon_t$$

Variable	Definition
kW_t	average hourly demand (kW) for each time period
A	estimated constant term
B_{ij} through J_i	regression model parameters
$Hour_i$	series of binary variables for each hour, which account for the basic hourly load shape of the customer after other factors such as weather and prices are accounted for
DOW_j	series of binary variables representing weekdays (Mon-Fri); weekends and holidays are excluded from the model. Energy use immediately before or after a weekend may be different compared to load in the middle of the week.
$Month_j$	series of binary variables for each month designed to reflect seasonality in loads
CDD_t	cooling degree day – the maximum of zero and the mean temperature of the day of the hourly observation less a base value 60 °F
$CDDsqr_t$	CDD_t squared
CDH_t	cooling degree hour – the maximum of zero and the hourly temperature less a base value 60 °F

Variable	Definition
$CDHsqr_t$	CDH_t squared
$Summer_t$	binary variable reflecting summer months of July through October
PLS_t	binary variable reflecting when the TES system is operational
e_t	error term

Appendix C Portfolio Aggregate Ex Ante Load Impact Estimates for 1-in-2 SCE-specific System Conditions by Month and Forecast Year

Table C-1: 2017 Portfolio Aggregate Ex Ante Load Impact Estimates for 1-in-2 SCE-specific System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	109	121	129	120	136	147	148	149	149	150	142	123
	BIP-30	432	437	433	469	502	490	489	511	486	500	453	433
	AP-I	22	25	31	43	49	53	52	50	40	37	28	26
	SUB-TOTAL	**563**	**583**	**593**	**631**	**687**	**691**	**689**	**710**	**675**	**687**	**623**	**581**
Price-responsive	SDP-C	9	10	10	21	23	25	29	36	32	30	15	8
	SDP-R	0	0	0	53	86	122	171	213	164	123	28	0
	CPP-Large	8	8	8	17	17	17	16	17	17	18	8	8
	CPP-Medium	0	0	0	0	0	0	0	0	0	0	0	0
	CPP-Small	0	0	0	0	0	0	0	0	0	0	0	0
	DBP	4	4	4	5	5	5	5	5	5	5	5	4
	SUB-TOTAL	**21**	**22**	**22**	**95**	**132**	**169**	**221**	**271**	**219**	**176**	**56**	**20**
Demand Response Aggregator-managed	CBP-DA	1	1	1	1	1	1	2	2	2	2	1	1
	CBP-DO	24	25	24	26	23	28	28	29	33	32	24	23
	AMP	82	82	82	82	80	78	77	79	77	77	83	83
	SUB-TOTAL	**107**	**108**	**107**	**109**	**104**	**107**	**107**	**110**	**112**	**111**	**108**	**108**
SmartConnect®-enabled	SPD with Tech.	0	0	-1	6	7	8	10	11	10	10	0	1
	SUB-TOTAL	**0**	**0**	**-1**	**6**	**7**	**8**	**10**	**11**	**10**	**10**	**0**	**1**
Nonevent Based	RTP	0	0	0	0	0	-1	-1	1	-1	0	0	0
	PLS	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*
	SUB-TOTAL	**0**	**0**	**0**	**0**	**0**	**-1**	**-1**	**1**	**-1**	**0**	**0**	**0**
PORTFOLIO TOTAL		**691**	**714**	**721**	**841**	**929**	**974**	**1,025**	**1,103**	**1,015**	**984**	**788**	**709**

*Load impacts are redacted to protect confidential customer information

Table C-2: 2018 Portfolio Aggregate Ex Ante Load Impact Estimates for 1-in-2 SCE-specific System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	126	139	136	126	138	147	148	148	148	149	141	122
	BIP-30	433	436	430	465	496	484	482	501	477	491	445	425
	AP-I	22	26	32	44	50	54	52	50	41	38	28	26
	SUB-TOTAL	**581**	**601**	**598**	**635**	**684**	**685**	**683**	**699**	**665**	**678**	**613**	**572**
Price-responsive	SDP-C	8	9	10	19	22	24	27	34	30	27	14	7
	SDP-R	0	0	0	50	82	116	162	202	155	117	27	0
	CPP-Large	8	8	8	17	17	17	16	17	17	18	8	8
	CPP-Medium	0	0	0	0	0	0	0	0	0	4	1	1
	CPP-Small	0	0	0	0	0	0	0	0	0	1	0	0
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**16**	**17**	**17**	**86**	**121**	**156**	**205**	**252**	**203**	**167**	**51**	**16**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	37	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**40**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**39**
SmartConnect®-enabled	SPD with Tech.	1	1	-2	11	12	14	16	19	17	17	0	1
	SUB-TOTAL	**1**	**1**	**-2**	**11**	**12**	**14**	**16**	**19**	**17**	**17**	**0**	**1**
Nonevent Based	RTP	0	0	0	0	0	-1	-1	1	-1	0	0	0
	PLS	0	0	0	0	3	3	4	4	4	4	0	0
	SUB-TOTAL	**0**	**0**	**0**	**0**	**3**	**2**	**2**	**5**	**3**	**4**	**0**	**0**
PORTFOLIO TOTAL		**638**	**661**	**654**	**775**	**858**	**904**	**954**	**1,026**	**945**	**919**	**704**	**629**

Table C-3: 2019 Portfolio Aggregate Ex Ante Load Impact Estimates for 1-in-2 SCE-specific System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	125	138	135	125	137	147	148	146	147	147	139	121
	BIP-30	424	427	422	455	484	472	469	489	465	478	434	414
	AP-I	22	26	32	44	50	54	53	51	41	38	28	26
	SUB-TOTAL	**571**	**591**	**590**	**624**	**671**	**674**	**671**	**686**	**653**	**664**	**601**	**561**
Price-responsive	SDP-C	8	9	9	18	20	22	25	31	28	25	13	7
	SDP-R	0	0	0	47	78	110	154	192	148	111	25	0
	CPP-Large	8	8	8	17	17	17	16	17	17	18	8	8
	CPP-Medium	1	1	1	3	3	4	4	4	4	9	4	3
	CPP-Small	0	0	0	1	1	1	1	1	1	6	4	4
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**17**	**18**	**18**	**86**	**119**	**153**	**200**	**245**	**197**	**170**	**55**	**22**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	37	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**40**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**39**
SmartConnect®-enabled	SPD with Tech.	1	1	-2	14	16	18	21	24	22	21	0	1
	SUB-TOTAL	**1**	**1**	**-2**	**14**	**16**	**18**	**21**	**24**	**22**	**21**	**0**	**1**
Nonevent Based	RTP	0	0	0	0	0	-1	-1	1	-1	0	0	0
	PLS	0	0	0	0	5	5	5	6	6	5	0	0
	SUB-TOTAL	**0**	**0**	**0**	**0**	**5**	**3**	**4**	**6**	**4**	**5**	**0**	**0**
PORTFOLIO TOTAL		**629**	**652**	**646**	**767**	**848**	**895**	**943**	**1,012**	**933**	**914**	**695**	**623**

Table C-4: 2020 Portfolio Aggregate Ex Ante Load Impact Estimates for 1-in-2 SCE-specific System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	124	137	134	124	136	146	147	145	146	146	135	116
	BIP-30	414	415	412	445	474	464	461	479	456	469	425	406
	AP-I	22	26	32	44	50	54	52	50	40	38	28	26
	SUB-TOTAL	**560**	**578**	**578**	**613**	**660**	**664**	**661**	**675**	**642**	**653**	**587**	**548**
Price-responsive	SDP-C	7	8	8	16	19	20	23	29	25	23	12	6
	SDP-R	0	0	0	45	74	105	147	183	141	106	24	0
	CPP-Large	8	8	8	17	17	17	16	17	18	18	8	8
	CPP-Medium	3	3	3	8	8	9	10	11	10	4	1	1
	CPP-Small	4	4	4	5	5	6	7	8	7	2	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**22**	**23**	**23**	**91**	**124**	**157**	**202**	**246**	**200**	**153**	**48**	**17**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	37	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**40**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**39**
SmartConnect®-enabled	SPD with Tech.	1	1	-3	17	19	21	25	29	26	25	0	2
	SUB-TOTAL	**1**	**1**	**-3**	**17**	**19**	**21**	**25**	**29**	**26**	**25**	**0**	**2**
Nonevent Based	RTP	0	0	0	0	0	-1	-1	1	-1	0	0	0
	PLS	0	0	0	0	5	5	6	6	6	5	0	0
	SUB-TOTAL	**0**	**0**	**0**	**0**	**5**	**4**	**4**	**7**	**5**	**5**	**0**	**0**
PORTFOLIO TOTAL		**624**	**645**	**639**	**764**	**846**	**893**	**940**	**1,007**	**929**	**891**	**675**	**606**

Table C-5: 2021 Portfolio Aggregate Ex Ante Load Impact Estimates for 1-in-2 SCE-specific System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	119	133	130	120	131	142	142	140	141	141	133	115
	BIP-30	405	408	404	436	466	455	452	470	447	460	417	399
	AP-I	22	26	31	44	49	53	52	50	40	37	27	25
	SUB-TOTAL	**546**	**566**	**566**	**599**	**646**	**649**	**646**	**660**	**628**	**637**	**577**	**539**
Price-responsive	SDP-C	7	7	7	15	17	18	21	26	23	22	11	6
	SDP-R	0	0	0	43	71	100	139	174	134	100	23	0
	CPP-Large	8	8	8	17	17	17	16	17	18	18	8	8
	CPP-Medium	1	1	1	3	3	4	4	4	4	4	1	1
	CPP-Small	2	2	2	2	2	3	3	3	3	2	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**17**	**18**	**18**	**80**	**110**	**141**	**183**	**224**	**181**	**146**	**46**	**16**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	37	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**40**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**39**
SmartConnect®-enabled	SPD with Tech.	2	2	-3	20	22	25	29	34	30	30	0	2
	SUB-TOTAL	**2**	**2**	**-3**	**20**	**22**	**25**	**29**	**34**	**30**	**30**	**0**	**2**
Nonevent Based	RTP	0	0	0	0	0	-1	-1	1	-1	0	0	0
	PLS	0	0	0	0	5	6	6	6	6	6	0	0
	SUB-TOTAL	**0**	**0**	**0**	**0**	**5**	**4**	**5**	**7**	**5**	**6**	**0**	**0**
PORTFOLIO TOTAL		**606**	**628**	**622**	**742**	**822**	**867**	**911**	**976**	**901**	**873**	**662**	**597**

Table C-6: 2022 Portfolio Aggregate Ex Ante Load Impact Estimates for 1-in-2 SCE-specific System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	118	131	129	118	129	140	141	140	140	141	133	115
	BIP-30	397	401	397	427	457	447	443	462	440	453	411	394
	AP-I	22	25	31	43	49	52	51	49	39	36	27	25
	SUB-TOTAL	**537**	**557**	**556**	**587**	**635**	**639**	**634**	**650**	**620**	**630**	**571**	**534**
Price-responsive	SDP-C	6	7	7	14	16	17	19	24	21	20	10	5
	SDP-R	0	0	0	41	67	95	132	165	127	95	22	0
	CPP-Large	8	8	8	17	17	17	16	17	18	18	9	8
	CPP-Medium	1	1	1	3	3	4	4	4	4	4	1	1
	CPP-Small	2	2	2	2	2	3	3	3	3	2	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**17**	**18**	**18**	**77**	**105**	**135**	**175**	**213**	**173**	**140**	**44**	**16**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	37	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**40**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**39**
SmartConnect®-enabled	SPD with Tech.	2	2	-4	23	26	29	33	39	35	34	0	2
	SUB-TOTAL	**2**	**2**	**-4**	**23**	**26**	**29**	**33**	**39**	**35**	**34**	**0**	**2**
Nonevent Based	RTP	0	0	0	0	0	-1	-1	1	-1	0	0	0
	PLS	0	0	0	0	6	6	7	7	7	6	0	0
	SUB-TOTAL	**0**	**0**	**0**	**0**	**6**	**5**	**5**	**7**	**5**	**6**	**0**	**0**
PORTFOLIO TOTAL		**596**	**618**	**611**	**730**	**809**	**854**	**895**	**960**	**889**	**864**	**655**	**591**

Table C-7: 2023 Portfolio Aggregate Ex Ante Load Impact Estimates for 1-in-2 SCE-specific System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	118	131	129	118	129	140	141	140	140	141	133	115
	BIP-30	394	397	393	425	455	445	443	462	440	453	411	394
	AP-I	22	25	31	43	48	52	51	49	39	36	27	25
	SUB-TOTAL	**533**	**553**	**553**	**586**	**633**	**637**	**634**	**650**	**620**	**630**	**571**	**534**
Price-responsive	SDP-C	6	6	6	13	14	16	18	22	20	18	9	5
	SDP-R	0	0	0	39	64	90	126	157	121	91	21	0
	CPP-Large	8	8	8	17	17	17	16	17	18	18	9	8
	CPP-Medium	1	1	1	3	3	4	4	4	4	4	1	1
	CPP-Small	2	2	2	2	2	3	3	3	3	2	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**16**	**17**	**17**	**74**	**101**	**129**	**167**	**203**	**165**	**133**	**42**	**15**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	37	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**40**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**39**
SmartConnect®-enabled	SPD with Tech.	2	2	-4	25	29	32	38	44	39	38	0	2
	SUB-TOTAL	**2**	**2**	**-4**	**25**	**29**	**32**	**38**	**44**	**39**	**38**	**0**	**2**
Nonevent Based	RTP	0	0	0	0	0	-1	-1	1	-1	0	0	0
	PLS	0	0	0	0	6	6	7	7	7	6	0	0
	SUB-TOTAL	**0**	**0**	**0**	**0**	**6**	**5**	**6**	**8**	**6**	**6**	**0**	**0**
PORTFOLIO TOTAL		**592**	**614**	**606**	**728**	**806**	**850**	**892**	**955**	**885**	**862**	**653**	**591**

Table C-8: 2024 Portfolio Aggregate Ex Ante Load Impact Estimates for 1-in-2 SCE-specific System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	118	131	129	118	129	140	141	140	140	141	133	115
	BIP-30	394	397	393	425	455	445	443	462	440	453	411	394
	AP-I	22	25	31	43	48	52	51	49	39	36	27	25
	SUB-TOTAL	**533**	**553**	**553**	**586**	**633**	**637**	**634**	**650**	**620**	**630**	**571**	**534**
Price-responsive	SDP-C	5	6	6	12	13	14	16	20	18	17	9	4
	SDP-R	0	0	0	37	61	85	119	149	115	86	20	0
	CPP-Large	8	8	8	17	17	17	16	17	18	18	9	8
	CPP-Medium	1	1	1	3	3	4	4	4	4	4	1	1
	CPP-Small	2	2	2	2	2	3	3	3	3	2	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**16**	**17**	**16**	**71**	**97**	**123**	**159**	**193**	**157**	**127**	**40**	**15**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	37	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**40**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**39**
SmartConnect®-enabled	SPD with Tech.	2	2	-4	28	32	36	42	49	43	42	0	3
	SUB-TOTAL	**2**	**2**	**-4**	**28**	**32**	**36**	**42**	**49**	**43**	**42**	**0**	**3**
Nonevent Based	RTP	0	0	0	0	0	-1	-1	1	-1	0	0	0
	PLS	0	0	0	0	6	6	7	7	7	6	0	0
	SUB-TOTAL	**0**	**0**	**0**	**0**	**6**	**5**	**6**	**8**	**6**	**7**	**0**	**0**
PORTFOLIO TOTAL		**592**	**614**	**605**	**728**	**805**	**848**	**888**	**951**	**882**	**860**	**651**	**591**

Table C-9: 2025 Portfolio Aggregate Ex Ante Load Impact Estimates for 1-in-2 SCE-specific System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	118	131	129	118	129	140	141	140	140	141	133	115
	BIP-30	394	397	393	425	455	445	443	462	440	453	411	394
	AP-I	22	25	31	43	48	52	51	49	39	36	27	25
	SUB-TOTAL	**533**	**553**	**553**	**586**	**633**	**637**	**634**	**650**	**620**	**630**	**571**	**534**
Price-responsive	SDP-C	5	5	5	11	12	13	15	19	17	15	8	4
	SDP-R	0	0	0	35	57	81	113	141	109	82	19	0
	CPP-Large	8	8	8	17	17	17	16	17	18	18	9	8
	CPP-Medium	1	1	1	3	3	4	4	4	4	4	1	1
	CPP-Small	2	2	2	2	2	3	3	3	3	2	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**16**	**16**	**16**	**68**	**92**	**117**	**151**	**184**	**150**	**121**	**38**	**15**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	37	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**40**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**39**
SmartConnect®-enabled	SPD with Tech.	3	3	-5	31	35	40	46	54	48	46	0	3
	SUB-TOTAL	**3**	**3**	**-5**	**31**	**35**	**40**	**46**	**54**	**48**	**46**	**0**	**3**
Nonevent Based	RTP	0	0	0	0	0	-1	-1	1	-1	0	0	0
	PLS	0	0	0	0	6	6	7	7	7	6	0	0
	SUB-TOTAL	**0**	**0**	**0**	**0**	**6**	**5**	**5**	**8**	**6**	**6**	**0**	**0**
PORTFOLIO TOTAL		**592**	**614**	**604**	**728**	**804**	**846**	**885**	**946**	**879**	**859**	**649**	**591**

Table C-10: 2026 Portfolio Aggregate Ex Ante Load Impact Estimates for 1-in-2 SCE-specific System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	118	131	129	118	129	140	141	140	140	141	133	115
	BIP-30	394	397	393	425	455	445	443	462	440	453	411	394
	AP-I	22	25	31	43	48	52	51	49	39	36	27	25
	SUB-TOTAL	**533**	**553**	**553**	**586**	**633**	**637**	**634**	**650**	**620**	**630**	**571**	**534**
Price-responsive	SDP-C	4	5	5	10	11	12	14	17	15	14	7	4
	SDP-R	0	0	0	33	54	77	107	134	103	77	18	0
	CPP-Large	8	8	8	17	17	17	16	17	18	18	9	8
	CPP-Medium	1	1	1	3	3	4	4	4	4	4	1	1
	CPP-Small	2	2	2	2	2	3	3	3	3	2	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**15**	**16**	**16**	**65**	**88**	**112**	**144**	**175**	**143**	**116**	**37**	**14**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	37	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**40**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**39**
SmartConnect®-enabled	SPD with Tech.	3	3	-5	34	39	44	51	59	52	50	0	3
	SUB-TOTAL	**3**	**3**	**-5**	**34**	**39**	**44**	**51**	**59**	**52**	**50**	**0**	**3**
Nonevent Based	RTP	0	0	0	0	0	-1	-1	1	-1	0	0	0
	PLS	0	0	0	0	6	6	7	7	7	6	0	0
	SUB-TOTAL	**0**	**0**	**0**	**0**	**6**	**5**	**5**	**7**	**5**	**6**	**0**	**0**
PORTFOLIO TOTAL		**592**	**613**	**603**	**729**	**804**	**844**	**882**	**942**	**876**	**857**	**648**	**591**

Table C-11: 2027 Portfolio Aggregate Ex Ante Load Impact Estimates for 1-in-2 SCE-specific System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	118	131	129	118	129	140	141	140	140	141	133	115
	BIP-30	394	397	393	425	455	445	443	462	440	453	411	394
	AP-I	22	25	31	43	48	52	51	49	39	36	27	25
	SUB-TOTAL	**533**	**553**	**553**	**586**	**633**	**637**	**634**	**650**	**620**	**630**	**571**	**534**
Price-responsive	SDP-C	4	4	4	9	10	11	12	16	14	13	7	3
	SDP-R	0	0	0	31	52	73	102	127	98	73	17	0
	CPP-Large	8	8	8	17	17	17	16	17	18	18	9	8
	CPP-Medium	1	1	1	3	3	4	4	4	4	4	1	1
	CPP-Small	2	2	2	2	2	3	3	3	3	2	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**15**	**15**	**15**	**63**	**85**	**107**	**138**	**167**	**136**	**111**	**35**	**14**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	37	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**40**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**39**
SmartConnect®-enabled	SPD with Tech.	3	3	-6	37	42	47	55	64	56	55	0	3
	SUB-TOTAL	**3**	**3**	**-6**	**37**	**42**	**47**	**55**	**64**	**56**	**55**	**0**	**3**
Nonevent Based	RTP	0	0	0	0	0	-1	-1	1	-1	0	0	0
	PLS	0	0	0	0	6	6	6	7	7	6	0	0
	SUB-TOTAL	**0**	**0**	**0**	**0**	**6**	**4**	**5**	**7**	**5**	**6**	**0**	**0**
PORTFOLIO TOTAL		**592**	**613**	**603**	**729**	**803**	**842**	**879**	**939**	**874**	**856**	**646**	**591**

Appendix D Portfolio Aggregate Ex Ante Load Impact Estimates for 1-in-10 SCE-specific System Conditions by Month and Forecast Year

Table D-1: 2017 Portfolio Aggregate Ex Ante Load Impact Estimates for 1-in-10 SCE-specific System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	106	117	132	123	137	147	149	149	149	149	143	121
	BIP-30	435	433	434	473	515	506	495	518	499	506	460	435
	AP-I	24	25	34	48	54	55	53	53	43	42	33	25
	SUB-TOTAL	**565**	**575**	**600**	**645**	**706**	**708**	**697**	**720**	**691**	**697**	**636**	**581**
Price-responsive	SDP-C	7	9	14	29	34	32	35	40	41	34	20	7
	SDP-R	0	0	6	126	183	189	231	256	245	168	97	0
	CPP-Large	8	8	8	18	17	16	15	16	17	18	9	8
	CPP-Medium	0	0	0	0	0	0	0	0	0	0	0	0
	CPP-Small	0	0	0	0	0	0	0	0	0	0	0	0
	DBP	4	4	4	5	5	5	5	6	6	5	5	4
	SUB-TOTAL	**19**	**21**	**33**	**178**	**240**	**242**	**287**	**317**	**309**	**225**	**131**	**20**
Demand Response Aggregator-managed	CBP-DA	1	1	1	1	1	1	2	2	2	2	1	1
	CBP-DO	24	25	25	26	23	28	28	29	33	32	24	23
	AMP	83	82	82	82	80	78	77	79	77	77	83	83
	SUB-TOTAL	**108**	**108**	**109**	**109**	**104**	**107**	**107**	**110**	**112**	**111**	**108**	**108**
SmartConnect®-enabled	SPD with Tech.	1	1	0	8	10	10	11	12	13	11	1	1
	SUB-TOTAL	**1**	**1**	**0**	**8**	**10**	**10**	**11**	**12**	**13**	**11**	**1**	**1**
Nonevent Based	RTP	0	0	0	2	0	-1	4	1	6	2	1	0
	PLS	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*
	SUB-TOTAL	**0**	**0**	**0**	**2**	**0**	**-1**	**4**	**1**	**6**	**2**	**1**	**0**
PORTFOLIO TOTAL		**693**	**706**	**741**	**942**	**1,059**	**1,065**	**1,106**	**1,160**	**1,130**	**1,046**	**878**	**709**

*Load impacts are redacted to protect confidential customer information

Table D-2: 2018 Portfolio Aggregate Ex Ante Load Impact Estimates for 1-in-10 SCE-specific System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	123	134	140	129	139	147	149	148	148	148	142	120
	BIP-30	435	433	432	470	509	499	488	508	490	498	451	427
	AP-I	24	26	34	49	55	55	53	54	43	42	33	25
	SUB-TOTAL	**582**	**593**	**606**	**648**	**703**	**702**	**690**	**710**	**681**	**688**	**626**	**572**
Price-responsive	SDP-C	7	9	13	27	32	29	32	37	38	31	19	7
	SDP-R	0	0	6	119	174	179	220	243	233	159	93	0
	CPP-Large	8	8	8	18	17	16	15	16	17	18	9	8
	CPP-Medium	0	0	0	0	0	0	0	0	0	4	2	1
	CPP-Small	0	0	0	0	0	0	0	0	0	1	0	0
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**14**	**16**	**27**	**165**	**223**	**225**	**268**	**296**	**288**	**213**	**122**	**16**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	39	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**42**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**39**
SmartConnect®-enabled	SPD with Tech.	1	1	0	15	17	17	19	21	22	19	2	1
	SUB-TOTAL	**1**	**1**	**0**	**15**	**17**	**17**	**19**	**21**	**22**	**19**	**2**	**1**
Nonevent Based	RTP	0	0	0	2	0	-1	4	1	6	2	1	0
	PLS	0	0	0	0	4	4	4	4	5	4	0	0
	SUB-TOTAL	**0**	**0**	**0**	**2**	**4**	**2**	**8**	**5**	**10**	**6**	**1**	**0**
PORTFOLIO TOTAL		**638**	**652**	**675**	**872**	**985**	**993**	**1,032**	**1,081**	**1,057**	**979**	**791**	**629**

Table D-3: 2019 Portfolio Aggregate Ex Ante Load Impact Estimates for 1-in-10 SCE-specific System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	122	133	139	128	138	147	149	146	147	147	140	119
	BIP-30	426	424	424	460	497	487	476	496	478	485	440	416
	AP-I	24	26	35	49	55	56	53	54	43	42	33	25
	SUB-TOTAL	**573**	**583**	**597**	**637**	**690**	**690**	**678**	**697**	**668**	**674**	**614**	**561**
Price-responsive	SDP-C	6	8	12	25	30	27	30	34	35	29	17	6
	SDP-R	0	0	6	114	165	171	209	231	221	152	88	0
	CPP-Large	8	8	8	18	17	16	15	16	17	18	9	8
	CPP-Medium	1	1	1	4	4	4	4	4	4	9	4	3
	CPP-Small	0	0	0	1	1	1	1	1	1	6	5	4
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**15**	**17**	**28**	**161**	**217**	**219**	**259**	**287**	**279**	**214**	**123**	**22**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	39	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**42**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**39**
SmartConnect®-enabled	SPD with Tech.	2	2	0	19	22	21	24	26	27	23	2	2
	SUB-TOTAL	**2**	**2**	**0**	**19**	**22**	**21**	**24**	**26**	**27**	**23**	**2**	**2**
Nonevent Based	RTP	0	0	0	2	0	-1	4	1	6	2	1	0
	PLS	0	0	0	0	5	5	6	6	6	5	0	0
	SUB-TOTAL	**0**	**0**	**0**	**2**	**5**	**4**	**9**	**6**	**12**	**7**	**1**	**0**
PORTFOLIO TOTAL		**630**	**644**	**666**	**862**	**971**	**980**	**1,018**	**1,065**	**1,042**	**973**	**779**	**623**

Table D-4: 2020 Portfolio Aggregate Ex Ante Load Impact Estimates for 1-in-10 SCE-specific System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	121	132	138	127	137	146	148	145	145	146	136	115
	BIP-30	416	412	413	450	487	479	467	486	468	475	431	408
	AP-I	24	26	35	49	55	55	53	54	43	42	33	25
	SUB-TOTAL	**562**	**571**	**585**	**626**	**679**	**680**	**668**	**685**	**657**	**663**	**600**	**548**
Price-responsive	SDP-C	6	7	11	23	27	25	28	32	33	27	16	6
	SDP-R	0	0	5	108	157	162	199	220	211	144	84	0
	CPP-Large	8	8	8	18	17	16	15	16	17	18	9	8
	CPP-Medium	3	3	3	9	10	10	10	11	11	4	2	1
	CPP-Small	4	4	4	6	6	7	7	8	8	3	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**21**	**22**	**32**	**164**	**218**	**220**	**260**	**286**	**278**	**195**	**112**	**17**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	39	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**42**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**39**
SmartConnect®-enabled	SPD with Tech.	2	2	-1	23	27	26	29	31	32	28	2	2
	SUB-TOTAL	**2**	**2**	**-1**	**23**	**27**	**26**	**29**	**31**	**32**	**28**	**2**	**2**
Nonevent Based	RTP	0	0	0	2	0	-1	4	1	6	2	1	0
	PLS	0	0	0	0	5	6	6	6	6	6	0	0
	SUB-TOTAL	**0**	**0**	**0**	**2**	**5**	**4**	**10**	**7**	**12**	**7**	**1**	**0**
PORTFOLIO TOTAL		**625**	**637**	**659**	**858**	**967**	**977**	**1,014**	**1,059**	**1,036**	**948**	**755**	**606**

Table D-5: 2021 Portfolio Aggregate Ex Ante Load Impact Estimates for 1-in-10 SCE-specific System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	117	128	133	123	132	141	143	140	141	140	134	113
	BIP-30	407	405	406	440	479	469	458	477	460	466	423	401
	AP-I	24	26	34	49	54	55	52	53	42	41	32	25
	SUB-TOTAL	**548**	**559**	**573**	**612**	**665**	**665**	**653**	**670**	**643**	**647**	**589**	**539**
Price-responsive	SDP-C	5	7	10	21	25	23	25	29	30	24	15	5
	SDP-R	0	0	5	103	150	154	189	209	200	137	80	0
	CPP-Large	8	8	8	18	17	16	15	16	17	18	9	8
	CPP-Medium	1	1	1	4	4	4	4	4	4	4	2	1
	CPP-Small	2	2	2	2	3	3	3	3	3	3	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**16**	**18**	**27**	**148**	**198**	**200**	**237**	**262**	**254**	**186**	**107**	**16**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	39	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**42**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**39**
SmartConnect®-enabled	SPD with Tech.	2	2	-1	27	31	30	34	37	38	32	3	3
	SUB-TOTAL	**2**	**2**	**-1**	**27**	**31**	**30**	**34**	**37**	**38**	**32**	**3**	**3**
Nonevent Based	RTP	0	0	0	2	0	-1	4	1	6	2	1	0
	PLS	0	0	0	0	6	6	7	7	7	6	0	0
	SUB-TOTAL	**0**	**0**	**0**	**2**	**6**	**5**	**10**	**7**	**13**	**8**	**1**	**0**
PORTFOLIO TOTAL		**606**	**620**	**641**	**832**	**938**	**947**	**982**	**1,026**	**1,004**	**927**	**739**	**597**

Table D-6: 2022 Portfolio Aggregate Ex Ante Load Impact Estimates for 1-in-10 SCE-specific System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	116	127	132	121	131	139	141	140	140	140	134	113
	BIP-30	400	398	398	431	469	461	449	468	452	459	418	396
	AP-I	24	25	34	48	53	54	51	52	42	41	32	24
	SUB-TOTAL	**539**	**550**	**563**	**600**	**653**	**654**	**641**	**660**	**634**	**640**	**583**	**533**
Price-responsive	SDP-C	5	6	9	20	23	21	23	27	28	22	13	5
	SDP-R	0	0	5	98	142	146	180	198	190	130	76	0
	CPP-Large	8	8	8	18	17	16	15	16	17	18	9	8
	CPP-Medium	1	1	1	4	4	4	4	4	4	4	2	1
	CPP-Small	2	2	2	2	3	3	3	3	3	3	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**15**	**17**	**26**	**141**	**189**	**191**	**226**	**249**	**242**	**177**	**101**	**16**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	39	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**42**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**39**
SmartConnect®-enabled	SPD with Tech.	3	3	-1	31	36	35	39	42	43	37	3	3
	SUB-TOTAL	**3**	**3**	**-1**	**31**	**36**	**35**	**39**	**42**	**43**	**37**	**3**	**3**
Nonevent Based	RTP	0	0	0	2	0	-1	4	1	6	2	1	0
	PLS	0	0	0	0	6	6	7	7	7	6	0	0
	SUB-TOTAL	**0**	**0**	**0**	**2**	**6**	**5**	**11**	**8**	**13**	**8**	**1**	**0**
PORTFOLIO TOTAL		**597**	**611**	**630**	**818**	**922**	**931**	**964**	**1,008**	**989**	**917**	**729**	**591**

Table D-7: 2023 Portfolio Aggregate Ex Ante Load Impact Estimates for 1-in-10 SCE-specific System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	116	127	132	121	131	139	141	140	140	140	134	113
	BIP-30	396	394	395	429	467	459	449	468	452	459	418	396
	AP-I	23	25	33	48	53	54	51	52	42	41	32	24
	SUB-TOTAL	**535**	**546**	**560**	**598**	**651**	**652**	**641**	**660**	**634**	**640**	**583**	**533**
Price-responsive	SDP-C	4	6	9	18	21	19	22	25	25	21	12	5
	SDP-R	0	0	5	93	135	139	171	188	181	124	72	0
	CPP-Large	8	8	8	18	17	16	15	16	17	18	9	8
	CPP-Medium	1	1	1	4	4	4	4	4	4	4	2	1
	CPP-Small	2	2	2	2	3	3	3	3	3	3	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**15**	**17**	**25**	**135**	**180**	**182**	**215**	**237**	**230**	**169**	**97**	**15**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	39	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**42**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**39**
SmartConnect®-enabled	SPD with Tech.	3	3	-1	35	41	39	44	47	49	41	3	3
	SUB-TOTAL	**3**	**3**	**-1**	**35**	**41**	**39**	**44**	**47**	**49**	**41**	**3**	**3**
Nonevent Based	RTP	0	0	0	2	0	-1	4	1	6	2	1	0
	PLS	0	0	0	0	6	7	7	8	8	7	0	0
	SUB-TOTAL	**0**	**0**	**0**	**2**	**7**	**5**	**11**	**8**	**14**	**9**	**1**	**0**
PORTFOLIO TOTAL		**593**	**607**	**626**	**814**	**916**	**925**	**959**	**1,002**	**983**	**913**	**724**	**591**

Table D-8: 2024 Portfolio Aggregate Ex Ante Load Impact Estimates for 1-in-10 SCE-specific System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	116	127	132	121	131	139	141	140	140	140	134	113
	BIP-30	396	394	395	429	467	459	449	468	452	459	418	396
	AP-I	23	25	33	48	53	54	51	52	42	41	32	24
	SUB-TOTAL	**535**	**546**	**560**	**598**	**651**	**652**	**641**	**660**	**634**	**640**	**583**	**533**
Price-responsive	SDP-C	4	5	8	17	19	18	20	23	23	19	11	4
	SDP-R	0	0	4	88	128	132	162	179	172	117	68	0
	CPP-Large	8	8	8	18	17	16	15	16	17	18	9	8
	CPP-Medium	1	1	1	4	4	4	4	4	4	4	2	1
	CPP-Small	2	2	2	2	3	3	3	3	3	3	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**15**	**16**	**24**	**129**	**171**	**173**	**204**	**225**	**219**	**161**	**92**	**15**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	39	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**42**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**39**
SmartConnect®-enabled	SPD with Tech.	3	3	-1	40	45	43	49	53	54	46	4	4
	SUB-TOTAL	**3**	**3**	**-1**	**40**	**45**	**43**	**49**	**53**	**54**	**46**	**4**	**4**
Nonevent Based	RTP	0	0	0	2	0	-1	4	1	6	2	1	0
	PLS	0	0	0	0	6	7	7	8	8	7	0	0
	SUB-TOTAL	**0**	**0**	**0**	**2**	**7**	**5**	**11**	**8**	**14**	**9**	**1**	**0**
PORTFOLIO TOTAL		**593**	**607**	**625**	**812**	**912**	**921**	**953**	**996**	**977**	**910**	**720**	**591**

Table D-9: 2025 Portfolio Aggregate Ex Ante Load Impact Estimates for 1-in-10 SCE-specific System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	116	127	132	121	131	139	141	140	140	140	134	113
	BIP-30	396	394	395	429	467	459	449	468	452	459	418	396
	AP-I	23	25	33	48	53	54	51	52	42	41	32	24
	SUB-TOTAL	**535**	**546**	**560**	**598**	**651**	**652**	**641**	**660**	**634**	**640**	**583**	**533**
Price-responsive	SDP-C	4	5	7	15	18	16	18	21	21	17	10	4
	SDP-R	0	0	4	84	122	125	154	170	163	111	65	0
	CPP-Large	8	8	8	18	17	16	16	16	17	18	9	8
	CPP-Medium	1	1	1	4	4	4	4	4	4	4	2	1
	CPP-Small	2	2	2	2	3	3	3	3	3	3	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**14**	**16**	**23**	**123**	**163**	**165**	**195**	**214**	**208**	**153**	**88**	**15**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	39	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**42**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**39**
SmartConnect®-enabled	SPD with Tech.	4	4	-1	44	50	48	54	58	60	50	4	4
	SUB-TOTAL	**4**	**4**	**-1**	**44**	**50**	**48**	**54**	**58**	**60**	**50**	**4**	**4**
Nonevent Based	RTP	0	0	0	2	0	-1	4	1	6	2	1	0
	PLS	0	0	0	0	6	7	7	8	8	7	0	0
	SUB-TOTAL	**0**	**0**	**0**	**2**	**6**	**5**	**11**	**8**	**13**	**8**	**1**	**0**
PORTFOLIO TOTAL		**593**	**607**	**624**	**810**	**908**	**917**	**948**	**990**	**971**	**907**	**716**	**591**

Table D-10: 2026 Portfolio Aggregate Ex Ante Load Impact Estimates for 1-in-10 SCE-specific System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	116	127	132	121	131	139	141	140	140	140	134	113
	BIP-30	396	394	395	429	467	459	449	468	452	459	418	396
	AP-I	23	25	33	48	53	54	51	52	42	41	32	24
	SUB-TOTAL	**535**	**546**	**560**	**598**	**651**	**652**	**641**	**660**	**634**	**640**	**583**	**533**
Price-responsive	SDP-C	3	4	7	14	16	15	16	19	19	16	9	4
	SDP-R	0	0	4	79	115	119	146	161	154	106	61	0
	CPP-Large	8	8	8	18	17	17	16	16	17	18	9	8
	CPP-Medium	1	1	1	4	4	4	4	4	4	4	2	1
	CPP-Small	2	2	2	2	3	3	3	3	3	3	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**14**	**15**	**22**	**117**	**155**	**157**	**185**	**204**	**198**	**146**	**83**	**14**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	39	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**42**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**39**
SmartConnect®-enabled	SPD with Tech.	4	4	-1	48	55	52	59	63	65	55	5	4
	SUB-TOTAL	**4**	**4**	**-1**	**48**	**55**	**52**	**59**	**63**	**65**	**55**	**5**	**4**
Nonevent Based	RTP	0	0	0	2	0	-1	4	1	6	2	1	0
	PLS	0	0	0	0	6	7	7	7	7	6	0	0
	SUB-TOTAL	**0**	**0**	**0**	**2**	**6**	**5**	**11**	**8**	**13**	**8**	**1**	**0**
PORTFOLIO TOTAL		**593**	**607**	**623**	**808**	**905**	**913**	**944**	**985**	**967**	**904**	**712**	**591**

Table D-11: 2027 Portfolio Aggregate Ex Ante Load Impact Estimates for 1-in-10 SCE-specific System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	116	127	132	121	131	139	141	140	140	140	134	113
	BIP-30	396	394	395	429	467	459	449	468	452	459	418	396
	AP-I	23	25	33	48	53	54	51	52	42	41	32	24
	SUB-TOTAL	**535**	**546**	**560**	**598**	**651**	**652**	**641**	**660**	**634**	**640**	**583**	**533**
Price-responsive	SDP-C	3	4	6	13	15	14	15	17	18	14	9	3
	SDP-R	0	0	4	75	109	113	138	153	146	100	58	0
	CPP-Large	8	8	8	18	17	17	16	16	17	18	9	8
	CPP-Medium	1	1	1	4	4	4	4	4	4	4	2	1
	CPP-Small	2	2	2	2	3	3	3	3	3	3	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**14**	**15**	**21**	**112**	**148**	**150**	**176**	**194**	**189**	**139**	**79**	**14**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	39	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**42**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**39**
SmartConnect®-enabled	SPD with Tech.	4	4	-1	52	59	57	64	69	70	59	5	5
	SUB-TOTAL	**4**	**4**	**-1**	**52**	**59**	**57**	**64**	**69**	**70**	**59**	**5**	**5**
Nonevent Based	RTP	0	0	0	2	0	-1	4	1	6	2	1	0
	PLS	0	0	0	0	6	6	7	7	7	6	0	0
	SUB-TOTAL	**0**	**0**	**0**	**2**	**6**	**5**	**10**	**8**	**13**	**8**	**1**	**0**
PORTFOLIO TOTAL		**593**	**607**	**622**	**807**	**902**	**910**	**940**	**980**	**962**	**901**	**709**	**592**

Appendix E Program-specific Aggregate Ex Ante Load Impact Estimates for 1-in-2 SCE-specific System Conditions by Month and Forecast Year

Table E-1: 2017 Program-specific Aggregate Ex Ante Load Impact Estimates for 1-in-2 SCE-specific System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	109	121	129	120	136	147	148	149	149	150	142	123
	BIP-30	432	437	433	469	502	490	489	511	486	500	453	433
	AP-I	22	25	31	43	49	53	52	50	40	37	28	26
	SUB-TOTAL	**563**	**583**	**593**	**631**	**687**	**691**	**689**	**710**	**675**	**687**	**623**	**581**
Price-responsive	SDP-C	9	10	10	21	23	25	29	36	32	30	15	8
	SDP-R	0	0	0	53	86	122	171	213	164	123	28	0
	CPP-Large	14	15	14	31	31	31	30	31	32	33	16	14
	CPP-Medium	0	0	0	0	0	0	0	0	0	0	0	0
	CPP-Small	0	0	0	0	0	0	0	0	0	0	0	0
	DBP	51	51	52	52	61	101	101	103	99	62	59	48
	SUB-TOTAL	**75**	**75**	**76**	**157**	**203**	**280**	**330**	**382**	**327**	**248**	**118**	**70**
Demand Response Aggregator-managed	CBP-DA	1	1	1	1	1	1	2	2	2	2	1	1
	CBP-DO	24	25	24	26	23	28	28	29	33	32	24	23
	AMP	82	82	82	82	80	78	77	79	77	77	83	83
	SUB-TOTAL	**107**	**108**	**107**	**109**	**104**	**107**	**107**	**110**	**112**	**111**	**108**	**108**
SmartConnect®-enabled	SPD with Tech.	1	1	-1	7	8	10	12	14	13	13	0	1
	SUB-TOTAL	**1**	**1**	**-1**	**7**	**8**	**10**	**12**	**14**	**13**	**13**	**0**	**1**
Nonevent Based	RTP	1	1	1	0	0	-7	-7	2	-7	0	1	1
	PLS	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*
	SUB-TOTAL	**1**	**1**	**1**	**0**	**0**	**-7**	**-7**	**2**	**-7**	**0**	**1**	**1**
PORTFOLIO TOTAL		**746**	**768**	**775**	**904**	**1,002**	**1,081**	**1,131**	**1,218**	**1,120**	**1,058**	**850**	**760**

*Load impacts are redacted to protect confidential customer information

Table E-2: 2018 Program-specific Aggregate Ex Ante Load Impact Estimates for 1-in-2 SCE-specific System Condition

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	126	139	136	126	138	147	148	148	148	149	141	122
	BIP-30	433	436	430	465	496	484	482	501	477	491	445	425
	AP-I	22	26	32	44	50	54	52	50	41	38	28	26
	SUB-TOTAL	**581**	**601**	**598**	**635**	**684**	**685**	**683**	**699**	**665**	**678**	**613**	**572**
Price-responsive	SDP-C	8	9	10	19	22	24	27	34	30	27	14	7
	SDP-R	0	0	0	50	82	116	162	202	155	117	27	0
	CPP-Large	14	15	14	31	31	31	30	31	32	33	16	14
	CPP-Medium	0	0	0	0	0	0	0	0	0	4	1	1
	CPP-Small	0	0	0	0	0	0	0	0	0	1	0	0
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**23**	**24**	**24**	**100**	**135**	**170**	**219**	**267**	**218**	**182**	**58**	**23**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	37	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**40**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**39**
SmartConnect®-enabled	SPD with Tech.	1	1	-2	11	12	14	16	19	17	17	0	1
	SUB-TOTAL	**1**	**1**	**-2**	**11**	**12**	**14**	**16**	**19**	**17**	**17**	**0**	**1**
Nonevent Based	RTP	1	1	1	0	0	-7	-7	2	-7	0	1	1
	PLS	0	0	0	0	3	3	4	4	4	4	0	0
	SUB-TOTAL	**1**	**1**	**1**	**0**	**4**	**-3**	**-3**	**7**	**-2**	**4**	**1**	**1**
PORTFOLIO TOTAL		**645**	**668**	**661**	**789**	**873**	**913**	**963**	**1,042**	**954**	**935**	**712**	**637**

Table E-3: 2019 Program-specific Aggregate Ex Ante Load Impact Estimates for 1-in-2 SCE-specific System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	125	138	135	125	137	147	148	146	147	147	139	121
	BIP-30	424	427	422	455	484	472	469	489	465	478	434	414
	AP-I	22	26	32	44	50	54	53	51	41	38	28	26
	SUB-TOTAL	**571**	**591**	**590**	**624**	**671**	**674**	**671**	**686**	**653**	**664**	**601**	**561**
Price-responsive	SDP-C	8	9	9	18	20	22	25	31	28	25	13	7
	SDP-R	0	0	0	47	78	110	154	192	148	111	25	0
	CPP-Large	14	15	14	31	31	31	30	31	32	33	16	14
	CPP-Medium	1	1	1	3	3	4	4	4	4	9	4	3
	CPP-Small	0	0	0	1	1	1	1	1	1	6	4	4
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**24**	**25**	**25**	**100**	**134**	**167**	**214**	**259**	**212**	**185**	**62**	**28**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	37	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**40**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**39**
SmartConnect®-enabled	SPD with Tech.	1	1	-2	14	16	18	21	24	22	21	0	1
	SUB-TOTAL	**1**	**1**	**-2**	**14**	**16**	**18**	**21**	**24**	**22**	**21**	**0**	**1**
Nonevent Based	RTP	1	1	1	0	0	-7	-7	2	-7	0	1	1
	PLS	0	0	0	0	5	5	5	6	6	5	0	0
	SUB-TOTAL	**1**	**1**	**1**	**0**	**5**	**-2**	**-1**	**8**	**-1**	**5**	**1**	**1**
PORTFOLIO TOTAL		**637**	**659**	**653**	**782**	**863**	**904**	**951**	**1,028**	**942**	**930**	**703**	**631**

Table E-4: 2020 Program-specific Aggregate Ex Ante Load Impact Estimates for 1-in-2 SCE-specific System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	124	137	134	124	136	146	147	145	146	146	135	116
	BIP-30	414	415	412	445	474	464	461	479	456	469	425	406
	AP-I	22	26	32	44	50	54	52	50	40	38	28	26
	SUB-TOTAL	**560**	**578**	**578**	**613**	**660**	**664**	**661**	**675**	**642**	**653**	**587**	**548**
Price-responsive	SDP-C	7	8	8	16	19	20	23	29	25	23	12	6
	SDP-R	0	0	0	45	74	105	147	183	141	106	24	0
	CPP-Large	14	15	14	31	31	31	30	31	33	34	16	14
	CPP-Medium	3	3	3	8	8	9	10	11	10	4	1	1
	CPP-Small	4	4	4	5	5	6	7	8	7	2	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**29**	**30**	**30**	**106**	**138**	**171**	**216**	**261**	**215**	**169**	**55**	**23**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	37	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**40**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**39**
SmartConnect®-enabled	SPD with Tech.	1	1	-3	17	19	21	25	29	26	25	0	2
	SUB-TOTAL	**1**	**1**	**-3**	**17**	**19**	**21**	**25**	**29**	**26**	**25**	**0**	**2**
Nonevent Based	RTP	1	1	1	0	0	-7	-7	2	-7	0	1	1
	PLS	0	0	0	0	5	5	6	6	6	5	0	0
	SUB-TOTAL	**1**	**1**	**1**	**0**	**5**	**-2**	**-1**	**8**	**-1**	**6**	**1**	**1**
PORTFOLIO TOTAL		**631**	**652**	**646**	**779**	**860**	**902**	**949**	**1,023**	**938**	**907**	**682**	**613**

Table E-5: 2021 Program-specific Aggregate Ex Ante Load Impact Estimates for 1-in-2 SCE-specific System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	119	133	130	120	131	142	142	140	141	141	133	115
	BIP-30	405	408	404	436	466	455	452	470	447	460	417	399
	AP-I	22	26	31	44	49	53	52	50	40	37	27	25
	SUB-TOTAL	**546**	**566**	**566**	**599**	**646**	**649**	**646**	**660**	**628**	**637**	**577**	**539**
Price-responsive	SDP-C	7	7	7	15	17	18	21	26	23	22	11	6
	SDP-R	0	0	0	43	71	100	139	174	134	100	23	0
	CPP-Large	14	15	14	31	32	31	30	31	33	34	16	14
	CPP-Medium	1	1	1	3	3	4	4	4	4	4	1	1
	CPP-Small	2	2	2	2	2	3	3	3	3	2	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**24**	**25**	**25**	**95**	**125**	**155**	**197**	**239**	**196**	**162**	**53**	**23**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	37	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**40**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**39**
SmartConnect®-enabled	SPD with Tech.	2	2	-3	20	22	25	29	34	30	30	0	2
	SUB-TOTAL	**2**	**2**	**-3**	**20**	**22**	**25**	**29**	**34**	**30**	**30**	**0**	**2**
Nonevent Based	RTP	1	1	1	0	0	-7	-7	2	-7	0	1	1
	PLS	0	0	0	0	5	6	6	6	6	6	0	0
	SUB-TOTAL	**1**	**1**	**1**	**0**	**6**	**-1**	**0**	**9**	**0**	**6**	**1**	**1**
PORTFOLIO TOTAL		**613**	**635**	**629**	**756**	**837**	**876**	**919**	**992**	**911**	**889**	**670**	**604**

Table E-6: 2022 Program-specific Aggregate Ex Ante Load Impact Estimates for 1-in-2 SCE-specific System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	118	131	129	118	129	140	141	140	140	141	133	115
	BIP-30	397	401	397	427	457	447	443	462	440	453	411	394
	AP-I	22	25	31	43	49	52	51	49	39	36	27	25
	SUB-TOTAL	**537**	**557**	**556**	**587**	**635**	**639**	**634**	**650**	**620**	**630**	**571**	**534**
Price-responsive	SDP-C	6	7	7	14	16	17	19	24	21	20	10	5
	SDP-R	0	0	0	41	67	95	132	165	127	95	22	0
	CPP-Large	15	15	14	31	32	31	30	31	33	34	16	14
	CPP-Medium	1	1	1	3	3	4	4	4	4	4	1	1
	CPP-Small	2	2	2	2	2	3	3	3	3	2	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**24**	**24**	**24**	**91**	**120**	**149**	**189**	**228**	**188**	**155**	**51**	**23**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	37	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**40**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**39**
SmartConnect®-enabled	SPD with Tech.	2	2	-4	23	26	29	33	39	35	34	0	2
	SUB-TOTAL	**2**	**2**	**-4**	**23**	**26**	**29**	**33**	**39**	**35**	**34**	**0**	**2**
Nonevent Based	RTP	1	1	1	0	0	-7	-7	2	-7	0	1	1
	PLS	0	0	0	0	6	6	7	7	7	6	0	0
	SUB-TOTAL	**1**	**1**	**1**	**0**	**6**	**-1**	**0**	**9**	**0**	**6**	**1**	**1**
PORTFOLIO TOTAL		**604**	**626**	**618**	**745**	**824**	**863**	**904**	**977**	**899**	**880**	**662**	**598**

Table E-7: 2023 Program-specific Aggregate Ex Ante Load Impact Estimates for 1-in-2 SCE-specific System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	118	131	129	118	129	140	141	140	140	141	133	115
	BIP-30	394	397	393	425	455	445	443	462	440	453	411	394
	AP-I	22	25	31	43	48	52	51	49	39	36	27	25
	SUB-TOTAL	**533**	**553**	**553**	**586**	**633**	**637**	**634**	**650**	**620**	**630**	**571**	**534**
Price-responsive	SDP-C	6	6	6	13	14	16	18	22	20	18	9	5
	SDP-R	0	0	0	39	64	90	126	157	121	91	21	0
	CPP-Large	15	15	14	31	32	31	30	31	33	34	16	14
	CPP-Medium	1	1	1	3	3	4	4	4	4	4	1	1
	CPP-Small	2	2	2	2	2	3	3	3	3	2	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**23**	**24**	**24**	**88**	**116**	**143**	**181**	**218**	**180**	**149**	**49**	**22**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	37	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**40**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**39**
SmartConnect®-enabled	SPD with Tech.	2	2	-4	25	29	32	38	44	39	38	0	2
	SUB-TOTAL	**2**	**2**	**-4**	**25**	**29**	**32**	**38**	**44**	**39**	**38**	**0**	**2**
Nonevent Based	RTP	1	1	1	0	0	-7	-7	2	-7	0	1	1
	PLS	0	0	0	0	6	6	7	7	7	6	0	0
	SUB-TOTAL	**1**	**1**	**1**	**0**	**6**	**0**	**0**	**10**	**0**	**7**	**1**	**1**
PORTFOLIO TOTAL		**599**	**621**	**613**	**743**	**821**	**859**	**900**	**972**	**895**	**878**	**661**	**598**

Table E-8: 2024 Program-specific Aggregate Ex Ante Load Impact Estimates for 1-in-2 SCE-specific System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	118	131	129	118	129	140	141	140	140	141	133	115
	BIP-30	394	397	393	425	455	445	443	462	440	453	411	394
	AP-I	22	25	31	43	48	52	51	49	39	36	27	25
	SUB-TOTAL	**533**	**553**	**553**	**586**	**633**	**637**	**634**	**650**	**620**	**630**	**571**	**534**
Price-responsive	SDP-C	5	6	6	12	13	14	16	20	18	17	9	4
	SDP-R	0	0	0	37	61	85	119	149	115	86	20	0
	CPP-Large	15	15	14	32	32	31	30	31	33	34	16	14
	CPP-Medium	1	1	1	3	3	4	4	4	4	4	1	1
	CPP-Small	2	2	2	2	2	3	3	3	3	2	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**23**	**23**	**23**	**85**	**111**	**137**	**173**	**208**	**172**	**143**	**47**	**22**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	37	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**40**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**39**
SmartConnect®-enabled	SPD with Tech.	2	2	-4	28	32	36	42	49	43	42	0	3
	SUB-TOTAL	**2**	**2**	**-4**	**28**	**32**	**36**	**42**	**49**	**43**	**42**	**0**	**3**
Nonevent Based	RTP	1	1	1	0	0	-7	-7	2	-7	0	1	1
	PLS	0	0	0	0	6	6	7	7	7	6	0	0
	SUB-TOTAL	**1**	**1**	**1**	**0**	**6**	**0**	**0**	**10**	**1**	**7**	**1**	**1**
PORTFOLIO TOTAL		**599**	**621**	**612**	**743**	**820**	**857**	**897**	**967**	**892**	**876**	**659**	**598**

Table E-9: 2025 Program-specific Aggregate Ex Ante Load Impact Estimates for 1-in-2 SCE-specific System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	118	131	129	118	129	140	141	140	140	141	133	115
	BIP-30	394	397	393	425	455	445	443	462	440	453	411	394
	AP-I	22	25	31	43	48	52	51	49	39	36	27	25
	SUB-TOTAL	**533**	**553**	**553**	**586**	**633**	**637**	**634**	**650**	**620**	**630**	**571**	**534**
Price-responsive	SDP-C	5	5	5	11	12	13	15	19	17	15	8	4
	SDP-R	0	0	0	35	57	81	113	141	109	82	19	0
	CPP-Large	15	15	15	32	32	31	30	32	33	34	16	14
	CPP-Medium	1	1	1	3	3	4	4	4	4	4	1	1
	CPP-Small	2	2	2	2	2	3	3	3	3	2	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**22**	**23**	**23**	**83**	**107**	**132**	**165**	**199**	**165**	**137**	**46**	**21**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	37	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**40**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**39**
SmartConnect®-enabled	SPD with Tech.	3	3	-5	31	35	40	46	54	48	46	0	3
	SUB-TOTAL	**3**	**3**	**-5**	**31**	**35**	**40**	**46**	**54**	**48**	**46**	**0**	**3**
Nonevent Based	RTP	1	1	1	0	0	-7	-7	2	-7	0	1	1
	PLS	0	0	0	0	6	6	7	7	7	6	0	0
	SUB-TOTAL	**1**	**1**	**1**	**0**	**6**	**-1**	**0**	**10**	**0**	**6**	**1**	**1**
PORTFOLIO TOTAL		**599**	**621**	**611**	**743**	**819**	**855**	**894**	**963**	**889**	**874**	**657**	**598**

Table E-10: 2026 Program-specific Aggregate Ex Ante Load Impact Estimates for 1-in-2 SCE-specific System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	118	131	129	118	129	140	141	140	140	141	133	115
	BIP-30	394	397	393	425	455	445	443	462	440	453	411	394
	AP-I	22	25	31	43	48	52	51	49	39	36	27	25
	SUB-TOTAL	**533**	**553**	**553**	**586**	**633**	**637**	**634**	**650**	**620**	**630**	**571**	**534**
Price-responsive	SDP-C	4	5	5	10	11	12	14	17	15	14	7	4
	SDP-R	0	0	0	33	54	77	107	134	103	77	18	0
	CPP-Large	15	15	15	32	32	32	30	32	33	34	16	15
	CPP-Medium	1	1	1	3	3	4	4	4	4	4	1	1
	CPP-Small	2	2	2	2	2	3	3	3	3	2	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**22**	**23**	**22**	**80**	**103**	**127**	**158**	**190**	**158**	**132**	**44**	**21**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	37	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**40**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**39**
SmartConnect®-enabled	SPD with Tech.	3	3	-5	34	39	44	51	59	52	50	0	3
	SUB-TOTAL	**3**	**3**	**-5**	**34**	**39**	**44**	**51**	**59**	**52**	**50**	**0**	**3**
Nonevent Based	RTP	1	1	1	0	0	-7	-7	2	-7	0	1	1
	PLS	0	0	0	0	6	6	7	7	7	6	0	0
	SUB-TOTAL	**1**	**1**	**1**	**0**	**6**	**-1**	**0**	**9**	**0**	**6**	**1**	**1**
PORTFOLIO TOTAL		**599**	**621**	**611**	**743**	**818**	**853**	**891**	**959**	**886**	**873**	**655**	**598**

Table E-11: 2027 Program-specific Aggregate Ex Ante Load Impact Estimates for 1-in-2 SCE-specific System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	118	131	129	118	129	140	141	140	140	141	133	115
	BIP-30	394	397	393	425	455	445	443	462	440	453	411	394
	AP-I	22	25	31	43	48	52	51	49	39	36	27	25
	SUB-TOTAL	**533**	**553**	**553**	**586**	**633**	**637**	**634**	**650**	**620**	**630**	**571**	**534**
Price-responsive	SDP-C	4	4	4	9	10	11	12	16	14	13	7	3
	SDP-R	0	0	0	31	52	73	102	127	98	73	17	0
	CPP-Large	15	15	15	32	32	32	31	32	33	34	16	15
	CPP-Medium	1	1	1	3	3	4	4	4	4	4	1	1
	CPP-Small	2	2	2	2	2	3	3	3	3	2	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**22**	**22**	**22**	**77**	**99**	**122**	**152**	**182**	**151**	**127**	**43**	**21**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	37	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**40**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**39**
SmartConnect®-enabled	SPD with Tech.	3	3	-6	37	42	47	55	64	56	55	0	3
	SUB-TOTAL	**3**	**3**	**-6**	**37**	**42**	**47**	**55**	**64**	**56**	**55**	**0**	**3**
Nonevent Based	RTP	1	1	1	0	0	-7	-7	2	-7	0	1	1
	PLS	0	0	0	0	6	6	6	7	7	6	0	0
	SUB-TOTAL	**1**	**1**	**1**	**0**	**6**	**-1**	**0**	**9**	**0**	**6**	**1**	**1**
PORTFOLIO TOTAL		**599**	**621**	**610**	**744**	**818**	**852**	**888**	**955**	**884**	**872**	**654**	**598**

Appendix F Program-specific Ex Ante Load Impact Estimates for 1-in-10 SCE-specific System Conditions by Month and Forecast Year

Table F-1: 2017 Program-specific Aggregate Ex Ante Load Impact Estimates for 1-in-10 SCE-specific System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	106	117	132	123	137	147	149	149	149	149	143	121
	BIP-30	435	433	434	473	515	506	495	518	499	506	460	435
	AP-I	24	25	34	48	54	55	53	53	43	42	33	25
	SUB-TOTAL	**565**	**575**	**600**	**645**	**706**	**708**	**697**	**720**	**691**	**697**	**636**	**581**
Price-responsive	SDP-C	7	9	14	29	34	32	35	40	41	34	20	7
	SDP-R	0	0	6	126	183	189	231	256	245	168	97	0
	CPP-Large	14	14	15	33	31	30	28	29	31	33	16	14
	CPP-Medium	0	0	0	0	0	0	0	0	0	0	0	0
	CPP-Small	0	0	0	0	0	0	0	0	0	0	0	0
	DBP	49	49	54	53	62	102	101	103	99	62	59	47
	SUB-TOTAL	**71**	**73**	**90**	**241**	**311**	**352**	**396**	**428**	**416**	**297**	**193**	**69**
Demand Response Aggregator-managed	CBP-DA	1	1	1	1	1	1	2	2	2	2	1	1
	CBP-DO	24	25	25	26	23	28	28	29	33	32	24	23
	AMP	83	82	82	82	80	78	77	79	77	77	83	83
	SUB-TOTAL	**108**	**108**	**109**	**109**	**104**	**107**	**107**	**110**	**112**	**111**	**108**	**108**
SmartConnect®-enabled	SPD with Tech.	1	1	0	10	12	12	14	15	16	14	1	1
	SUB-TOTAL	**1**	**1**	**0**	**10**	**12**	**12**	**14**	**15**	**16**	**14**	**1**	**1**
Nonevent Based	RTP	1	1	1	9	0	-7	17	2	23	9	7	1
	PLS	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*
	SUB-TOTAL	**1**	**1**	**1**	**9**	**0**	**-7**	**17**	**2**	**23**	**9**	**7**	**1**
PORTFOLIO TOTAL		**745**	**758**	**798**	**1,013**	**1,133**	**1,172**	**1,230**	**1,276**	**1,257**	**1,127**	**945**	**759**

*Load impacts are redacted to protect confidential customer information

Table F-2: 2018 Program-specific Aggregate Ex Ante Load Impact Estimates for 1-in-10 SCE-specific System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	123	134	140	129	139	147	149	148	148	148	142	120
	BIP-30	435	433	432	470	509	499	488	508	490	498	451	427
	AP-I	24	26	34	49	55	55	53	54	43	42	33	25
	SUB-TOTAL	**582**	**593**	**606**	**648**	**703**	**702**	**690**	**710**	**681**	**688**	**626**	**572**
Price-responsive	SDP-C	7	9	13	27	32	29	32	37	38	31	19	7
	SDP-R	0	0	6	119	174	179	220	243	233	159	93	0
	CPP-Large	14	14	15	33	31	30	28	30	31	33	17	14
	CPP-Medium	0	0	0	0	0	0	0	0	0	4	2	1
	CPP-Small	0	0	0	0	0	0	0	0	0	1	0	0
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**21**	**23**	**34**	**180**	**238**	**239**	**281**	**310**	**302**	**228**	**130**	**23**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	39	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**42**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**39**
SmartConnect®-enabled	SPD with Tech.	1	1	0	15	17	17	19	21	22	19	2	1
	SUB-TOTAL	**1**	**1**	**0**	**15**	**17**	**17**	**19**	**21**	**22**	**19**	**2**	**1**
Nonevent Based	RTP	1	1	1	9	0	-7	17	2	23	9	7	1
	PLS	0	0	0	0	4	4	4	4	5	4	0	0
	SUB-TOTAL	**1**	**1**	**1**	**9**	**4**	**-3**	**21**	**7**	**27**	**13**	**7**	**1**
PORTFOLIO TOTAL		**645**	**659**	**682**	**894**	**1,000**	**1,001**	**1,059**	**1,097**	**1,088**	**1,002**	**804**	**636**

Table F-3: 2019 Program-specific Aggregate Ex Ante Load Impact Estimates for 1-in-10 SCE-specific System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	122	133	139	128	138	147	149	146	147	147	140	119
	BIP-30	426	424	424	460	497	487	476	496	478	485	440	416
	AP-I	24	26	35	49	55	56	53	54	43	42	33	25
	SUB-TOTAL	**573**	**583**	**597**	**637**	**690**	**690**	**678**	**697**	**668**	**674**	**614**	**561**
Price-responsive	SDP-C	6	8	12	25	30	27	30	34	35	29	17	6
	SDP-R	0	0	6	114	165	171	209	231	221	152	88	0
	CPP-Large	14	14	15	33	32	30	28	30	31	33	17	14
	CPP-Medium	1	1	1	4	4	4	4	4	4	10	4	3
	CPP-Small	0	0	0	1	1	1	1	1	1	6	5	4
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**22**	**24**	**35**	**176**	**231**	**233**	**273**	**300**	**293**	**230**	**130**	**28**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	39	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**42**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**39**
SmartConnect®-enabled	SPD with Tech.	2	2	0	19	22	21	24	26	27	23	2	2
	SUB-TOTAL	**2**	**2**	**0**	**19**	**22**	**21**	**24**	**26**	**27**	**23**	**2**	**2**
Nonevent Based	RTP	1	1	1	9	0	-7	17	2	23	9	7	1
	PLS	0	0	0	0	5	5	6	6	6	5	0	0
	SUB-TOTAL	**1**	**1**	**1**	**9**	**5**	**-2**	**22**	**8**	**28**	**14**	**7**	**1**
PORTFOLIO TOTAL		**637**	**651**	**674**	**884**	**986**	**989**	**1,045**	**1,081**	**1,073**	**995**	**793**	**630**

Table F-4: 2020 Program-specific Aggregate Ex Ante Load Impact Estimates for 1-in-10 SCE-specific System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	121	132	138	127	137	146	148	145	145	146	136	115
	BIP-30	416	412	413	450	487	479	467	486	468	475	431	408
	AP-I	24	26	35	49	55	55	53	54	43	42	33	25
	SUB-TOTAL	**562**	**571**	**585**	**626**	**679**	**680**	**668**	**685**	**657**	**663**	**600**	**548**
Price-responsive	SDP-C	6	7	11	23	27	25	28	32	33	27	16	6
	SDP-R	0	0	5	108	157	162	199	220	211	144	84	0
	CPP-Large	14	14	15	33	32	30	28	30	31	33	17	14
	CPP-Medium	3	3	4	9	10	10	10	11	11	4	2	1
	CPP-Small	4	4	4	6	6	7	7	8	8	3	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**27**	**29**	**39**	**179**	**232**	**234**	**273**	**300**	**292**	**211**	**120**	**23**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	39	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**42**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**39**
SmartConnect®-enabled	SPD with Tech.	2	2	-1	23	27	26	29	31	32	28	2	2
	SUB-TOTAL	**2**	**2**	**-1**	**23**	**27**	**26**	**29**	**31**	**32**	**28**	**2**	**2**
Nonevent Based	RTP	1	1	1	9	0	-7	17	2	23	9	7	1
	PLS	0	0	0	0	5	6	6	6	6	6	0	0
	SUB-TOTAL	**1**	**1**	**1**	**9**	**6**	**-1**	**23**	**9**	**29**	**14**	**7**	**1**
PORTFOLIO TOTAL		**632**	**644**	**666**	**880**	**981**	**985**	**1,041**	**1,075**	**1,067**	**970**	**768**	**613**

Table F-5: 2021 Program-specific Aggregate Ex Ante Load Impact Estimates for 1-in-10 SCE-specific System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	117	128	133	123	132	141	143	140	141	140	134	113
	BIP-30	407	405	406	440	479	469	458	477	460	466	423	401
	AP-I	24	26	34	49	54	55	52	53	42	41	32	25
	SUB-TOTAL	**548**	**559**	**573**	**612**	**665**	**665**	**653**	**670**	**643**	**647**	**589**	**539**
Price-responsive	SDP-C	5	7	10	21	25	23	25	29	30	24	15	5
	SDP-R	0	0	5	103	150	154	189	209	200	137	80	0
	CPP-Large	14	15	15	33	32	30	28	30	31	34	17	14
	CPP-Medium	1	1	1	4	4	4	4	4	4	4	2	1
	CPP-Small	2	2	2	2	3	3	3	3	3	3	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**22**	**24**	**34**	**163**	**213**	**214**	**250**	**275**	**269**	**201**	**114**	**23**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	39	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**42**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**39**
SmartConnect®-enabled	SPD with Tech.	2	2	-1	27	31	30	34	37	38	32	3	3
	SUB-TOTAL	**2**	**2**	**-1**	**27**	**31**	**30**	**34**	**37**	**38**	**32**	**3**	**3**
Nonevent Based	RTP	1	1	1	9	0	-7	17	2	23	9	7	1
	PLS	0	0	0	0	6	6	7	7	7	6	0	0
	SUB-TOTAL	**1**	**1**	**1**	**9**	**6**	**-1**	**23**	**9**	**29**	**15**	**7**	**1**
PORTFOLIO TOTAL		**613**	**628**	**649**	**854**	**953**	**955**	**1,008**	**1,041**	**1,035**	**950**	**753**	**604**

Table F-6: 2022 Program-specific Aggregate Ex Ante Load Impact Estimates for 1-in-10 SCE-specific System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	116	127	132	121	131	139	141	140	140	140	134	113
	BIP-30	400	398	398	431	469	461	449	468	452	459	418	396
	AP-I	24	25	34	48	53	54	51	52	42	41	32	24
	SUB-TOTAL	**539**	**550**	**563**	**600**	**653**	**654**	**641**	**660**	**634**	**640**	**583**	**533**
Price-responsive	SDP-C	5	6	9	20	23	21	23	27	28	22	13	5
	SDP-R	0	0	5	98	142	146	180	198	190	130	76	0
	CPP-Large	14	15	15	33	32	30	29	30	31	34	17	14
	CPP-Medium	1	1	1	4	4	4	4	4	4	4	2	1
	CPP-Small	2	2	2	2	3	3	3	3	3	3	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**22**	**24**	**33**	**156**	**204**	**205**	**239**	**263**	**256**	**193**	**109**	**22**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	39	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**42**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**39**
SmartConnect®-enabled	SPD with Tech.	3	3	-1	31	36	35	39	42	43	37	3	3
	SUB-TOTAL	**3**	**3**	**-1**	**31**	**36**	**35**	**39**	**42**	**43**	**37**	**3**	**3**
Nonevent Based	RTP	1	1	1	9	0	-7	17	2	23	9	7	1
	PLS	0	0	0	0	6	6	7	7	7	6	0	0
	SUB-TOTAL	**1**	**1**	**1**	**9**	**6**	**0**	**24**	**10**	**30**	**15**	**7**	**1**
PORTFOLIO TOTAL		**604**	**618**	**638**	**840**	**936**	**940**	**991**	**1,024**	**1,020**	**939**	**742**	**599**

Table F-7: 2023 Program-specific Aggregate Ex Ante Load Impact Estimates for 1-in-10 SCE-specific System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	116	127	132	121	131	139	141	140	140	140	134	113
	BIP-30	396	394	395	429	467	459	449	468	452	459	418	396
	AP-I	23	25	33	48	53	54	51	52	42	41	32	24
	SUB-TOTAL	**535**	**546**	**560**	**598**	**651**	**652**	**641**	**660**	**634**	**640**	**583**	**533**
Price-responsive	SDP-C	4	6	9	18	21	19	22	25	25	21	12	5
	SDP-R	0	0	5	93	135	139	171	188	181	124	72	0
	CPP-Large	14	15	15	33	32	30	29	30	31	34	17	14
	CPP-Medium	1	1	1	4	4	4	4	4	4	4	2	1
	CPP-Small	2	2	2	2	3	3	3	3	3	3	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**22**	**23**	**32**	**150**	**195**	**196**	**228**	**251**	**245**	**184**	**104**	**22**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	39	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**42**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**39**
SmartConnect®-enabled	SPD with Tech.	3	3	-1	35	41	39	44	47	49	41	3	3
	SUB-TOTAL	**3**	**3**	**-1**	**35**	**41**	**39**	**44**	**47**	**49**	**41**	**3**	**3**
Nonevent Based	RTP	1	1	1	9	0	-7	17	2	23	9	7	1
	PLS	0	0	0	0	6	7	7	8	8	7	0	0
	SUB-TOTAL	**1**	**1**	**1**	**9**	**7**	**0**	**24**	**10**	**30**	**15**	**7**	**1**
PORTFOLIO TOTAL		**600**	**614**	**633**	**836**	**930**	**934**	**985**	**1,018**	**1,014**	**935**	**738**	**599**

Table F-8: 2024 Program-specific Aggregate Ex Ante Load Impact Estimates for 1-in-10 SCE-specific System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	116	127	132	121	131	139	141	140	140	140	134	113
	BIP-30	396	394	395	429	467	459	449	468	452	459	418	396
	AP-I	23	25	33	48	53	54	51	52	42	41	32	24
	SUB-TOTAL	**535**	**546**	**560**	**598**	**651**	**652**	**641**	**660**	**634**	**640**	**583**	**533**
Price-responsive	SDP-C	4	5	8	17	19	18	20	23	23	19	11	4
	SDP-R	0	0	4	88	128	132	162	179	172	117	68	0
	CPP-Large	14	15	15	33	32	31	29	30	31	34	17	14
	CPP-Medium	1	1	1	4	4	4	4	4	4	4	2	1
	CPP-Small	2	2	2	2	3	3	3	3	3	3	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**21**	**23**	**31**	**144**	**186**	**187**	**218**	**239**	**234**	**177**	**100**	**22**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	39	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**42**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**39**
SmartConnect®-enabled	SPD with Tech.	3	3	-1	40	45	43	49	53	54	46	4	4
	SUB-TOTAL	**3**	**3**	**-1**	**40**	**45**	**43**	**49**	**53**	**54**	**46**	**4**	**4**
Nonevent Based	RTP	1	1	1	9	0	-7	17	2	23	9	7	1
	PLS	0	0	0	0	6	7	7	8	8	7	0	0
	SUB-TOTAL	**1**	**1**	**1**	**9**	**7**	**0**	**24**	**10**	**30**	**15**	**7**	**1**
PORTFOLIO TOTAL		**600**	**614**	**632**	**834**	**927**	**930**	**980**	**1,012**	**1,008**	**932**	**733**	**599**

Table F-9: 2025 Program-specific Aggregate Ex Ante Load Impact Estimates for 1-in-10 SCE-specific System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	116	127	132	121	131	139	141	140	140	140	134	113
	BIP-30	396	394	395	429	467	459	449	468	452	459	418	396
	AP-I	23	25	33	48	53	54	51	52	42	41	32	24
	SUB-TOTAL	**535**	**546**	**560**	**598**	**651**	**652**	**641**	**660**	**634**	**640**	**583**	**533**
Price-responsive	SDP-C	4	5	7	15	18	16	18	21	21	17	10	4
	SDP-R	0	0	4	84	122	125	154	170	163	111	65	0
	CPP-Large	14	15	15	33	32	31	29	30	31	34	17	14
	CPP-Medium	1	1	1	4	4	4	4	4	4	4	2	1
	CPP-Small	2	2	2	2	3	3	3	3	3	3	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**21**	**22**	**30**	**138**	**178**	**179**	**208**	**228**	**223**	**169**	**95**	**21**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	39	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**42**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**39**
SmartConnect®-enabled	SPD with Tech.	4	4	-1	44	50	48	54	58	60	50	4	4
	SUB-TOTAL	**4**	**4**	**-1**	**44**	**50**	**48**	**54**	**58**	**60**	**50**	**4**	**4**
Nonevent Based	RTP	1	1	1	9	0	-7	17	2	23	9	7	1
	PLS	0	0	0	0	6	7	7	8	8	7	0	0
	SUB-TOTAL	**1**	**1**	**1**	**9**	**7**	**0**	**24**	**10**	**30**	**15**	**7**	**1**
PORTFOLIO TOTAL		**600**	**614**	**631**	**832**	**923**	**926**	**975**	**1,006**	**1,003**	**929**	**729**	**599**

Table F-10: 2026 Program-specific Aggregate Ex Ante Load Impact Estimates for 1-in-10 SCE-specific System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	116	127	132	121	131	139	141	140	140	140	134	113
	BIP-30	396	394	395	429	467	459	449	468	452	459	418	396
	AP-I	23	25	33	48	53	54	51	52	42	41	32	24
	SUB-TOTAL	**535**	**546**	**560**	**598**	**651**	**652**	**641**	**660**	**634**	**640**	**583**	**533**
Price-responsive	SDP-C	3	4	7	14	16	15	16	19	19	16	9	4
	SDP-R	0	0	4	79	115	119	146	161	154	106	61	0
	CPP-Large	14	15	15	33	32	31	29	30	32	34	17	14
	CPP-Medium	1	1	1	4	4	4	4	4	4	4	2	1
	CPP-Small	2	2	2	2	3	3	3	3	3	3	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**21**	**22**	**29**	**133**	**170**	**171**	**198**	**218**	**213**	**162**	**91**	**21**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	39	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**42**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**39**
SmartConnect®-enabled	SPD with Tech.	4	4	-1	48	55	52	59	63	65	55	5	4
	SUB-TOTAL	**4**	**4**	**-1**	**48**	**55**	**52**	**59**	**63**	**65**	**55**	**5**	**4**
Nonevent Based	RTP	1	1	1	9	0	-7	17	2	23	9	7	1
	PLS	0	0	0	0	6	7	7	7	7	6	0	0
	SUB-TOTAL	**1**	**1**	**1**	**9**	**6**	**0**	**24**	**10**	**30**	**15**	**7**	**1**
PORTFOLIO TOTAL		**600**	**614**	**630**	**831**	**920**	**922**	**970**	**1,001**	**998**	**926**	**726**	**599**

Table F-11: 2027 Program-specific Aggregate Ex Ante Load Impact Estimates for 1-in-10 SCE-specific System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	116	127	132	121	131	139	141	140	140	140	134	113
	BIP-30	396	394	395	429	467	459	449	468	452	459	418	396
	AP-I	23	25	33	48	53	54	51	52	42	41	32	24
	SUB-TOTAL	**535**	**546**	**560**	**598**	**651**	**652**	**641**	**660**	**634**	**640**	**583**	**533**
Price-responsive	SDP-C	3	4	6	13	15	14	15	17	18	14	9	3
	SDP-R	0	0	4	75	109	113	138	153	146	100	58	0
	CPP-Large	14	15	15	34	32	31	29	30	32	34	17	15
	CPP-Medium	1	1	1	4	4	4	4	4	4	4	2	1
	CPP-Small	2	2	2	2	3	3	3	3	3	3	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**20**	**22**	**28**	**127**	**163**	**164**	**190**	**208**	**203**	**155**	**87**	**21**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	39	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**42**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**39**
SmartConnect®-enabled	SPD with Tech.	4	4	-1	52	59	57	64	69	70	59	5	5
	SUB-TOTAL	**4**	**4**	**-1**	**52**	**59**	**57**	**64**	**69**	**70**	**59**	**5**	**5**
Nonevent Based	RTP	1	1	1	9	0	-7	17	2	23	9	7	1
	PLS	0	0	0	0	6	6	7	7	7	6	0	0
	SUB-TOTAL	**1**	**1**	**1**	**9**	**6**	**0**	**24**	**10**	**30**	**15**	**7**	**1**
PORTFOLIO TOTAL		**600**	**614**	**629**	**829**	**917**	**919**	**966**	**996**	**993**	**924**	**722**	**599**

Appendix G Portfolio Aggregate Ex Ante Load Impact Estimates for 1-in-2 CAISO System Conditions by Month and Forecast Year

Table G-1: 2017 Portfolio Aggregate Ex Ante Load Impact Estimates for 1-in-2 CAISO System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	108	112	122	124	136	147	149	149	149	149	144	128
	BIP-30	432	437	433	469	502	490	489	511	486	500	453	433
	AP-I	22	25	30	43	53	54	52	51	43	37	24	24
	SUB-TOTAL	**562**	**574**	**584**	**636**	**691**	**692**	**690**	**711**	**677**	**686**	**621**	**584**
Price-responsive	SDP-C	8	8	9	19	22	27	34	36	35	25	14	9
	SDP-R	0	0	0	33	78	140	214	211	193	85	4	0
	CPP-Large	8	8	7	17	17	16	16	16	17	18	8	8
	CPP-Medium	0	0	0	0	0	0	0	0	0	0	0	0
	CPP-Small	0	0	0	0	0	0	0	0	0	0	0	0
	DBP	4	4	4	5	5	5	5	5	5	5	4	4
	SUB-TOTAL	**20**	**20**	**20**	**74**	**121**	**188**	**268**	**268**	**251**	**132**	**31**	**21**
Demand Response Aggregator-managed	CBP-DA	1	1	1	1	1	1	2	2	2	2	1	1
	CBP-DO	24	25	25	26	23	28	28	29	33	32	24	24
	AMP	83	82	82	82	80	78	77	79	77	77	83	83
	SUB-TOTAL	**108**	**108**	**108**	**109**	**104**	**107**	**107**	**110**	**112**	**111**	**108**	**108**
SmartConnect®-enabled	SPD with Tech.	0	0	-1	6	6	8	11	11	11	9	0	1
	SUB-TOTAL	**0**	**0**	**-1**	**6**	**6**	**8**	**11**	**11**	**11**	**9**	**0**	**1**
Nonevent Based	RTP	0	0	0	0	0	-1	1	4	1	0	0	0
	PLS	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*
	SUB-TOTAL	**0**	**0**	**0**	**0**	**0**	**-1**	**1**	**4**	**1**	**0**	**0**	**0**
PORTFOLIO TOTAL		**691**	**703**	**711**	**824**	**922**	**993**	**1,077**	**1,103**	**1,052**	**938**	**759**	**714**

*Load impacts are redacted to protect confidential customer information

Table G-2: 2018 Portfolio Aggregate Ex Ante Load Impact Estimates for 1-in-2 CAISO System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	125	129	129	130	138	147	149	147	148	148	143	127
	BIP-30	433	436	430	465	496	484	482	501	477	491	445	425
	AP-I	23	25	30	44	54	55	53	51	43	38	24	24
	SUB-TOTAL	**580**	**591**	**589**	**639**	**688**	**686**	**683**	**700**	**667**	**677**	**611**	**576**
Price-responsive	SDP-C	7	8	8	18	20	25	31	33	33	23	13	8
	SDP-R	0	0	0	32	74	133	203	200	184	80	4	0
	CPP-Large	8	8	7	17	17	16	16	17	17	18	8	8
	CPP-Medium	0	0	0	0	0	0	0	0	0	3	1	1
	CPP-Small	0	0	0	0	0	0	0	0	0	1	0	0
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**15**	**16**	**16**	**66**	**111**	**174**	**250**	**250**	**234**	**125**	**27**	**18**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	38	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**41**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**40**
SmartConnect®-enabled	SPD with Tech.	1	1	-2	10	11	14	18	19	19	14	0	1
	SUB-TOTAL	**1**	**1**	**-2**	**10**	**11**	**14**	**18**	**19**	**19**	**14**	**0**	**1**
Nonevent Based	RTP	0	0	0	0	0	-1	1	4	1	0	0	0
	PLS	0	0	0	0	3	4	4	4	4	4	0	0
	SUB-TOTAL	**0**	**0**	**0**	**0**	**3**	**2**	**5**	**8**	**5**	**4**	**0**	**0**
PORTFOLIO TOTAL		**636**	**649**	**644**	**759**	**852**	**923**	**1,004**	**1,026**	**981**	**875**	**677**	**634**

Table G-3: 2019 Portfolio Aggregate Ex Ante Load Impact Estimates for 1-in-2 CAISO System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	124	128	128	129	137	147	149	146	147	147	141	126
	BIP-30	424	427	422	455	484	472	469	489	465	478	434	414
	AP-I	23	26	30	44	55	55	53	52	43	38	24	24
	SUB-TOTAL	**570**	**581**	**581**	**629**	**675**	**674**	**672**	**687**	**655**	**663**	**599**	**564**
Price-responsive	SDP-C	7	7	7	16	19	23	29	31	30	21	12	8
	SDP-R	0	0	0	30	70	126	193	190	175	77	4	0
	CPP-Large	8	8	8	17	17	16	16	17	17	18	8	8
	CPP-Medium	1	1	1	3	3	4	4	4	4	9	3	3
	CPP-Small	0	0	0	1	1	1	1	1	1	6	4	4
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**16**	**16**	**16**	**67**	**110**	**170**	**243**	**242**	**227**	**130**	**31**	**23**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	38	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**41**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**40**
SmartConnect®-enabled	SPD with Tech.	1	1	-3	13	14	18	23	24	24	18	-1	1
	SUB-TOTAL	**1**	**1**	**-3**	**13**	**14**	**18**	**23**	**24**	**24**	**18**	**-1**	**1**
Nonevent Based	RTP	0	0	0	0	0	-1	1	4	1	0	0	0
	PLS	0	0	0	0	4	5	6	5	6	5	0	0
	SUB-TOTAL	**0**	**0**	**0**	**0**	**5**	**3**	**6**	**9**	**6**	**5**	**0**	**0**
PORTFOLIO TOTAL		**627**	**640**	**635**	**752**	**842**	**913**	**991**	**1,012**	**968**	**870**	**669**	**628**

Table G-4: 2020 Portfolio Aggregate Ex Ante Load Impact Estimates for 1-in-2 CAISO System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	123	127	127	128	136	146	148	145	145	146	136	122
	BIP-30	414	415	412	445	474	464	461	479	456	469	425	406
	AP-I	23	26	30	44	54	55	53	51	43	37	24	24
	SUB-TOTAL	**560**	**568**	**569**	**618**	**665**	**665**	**662**	**676**	**644**	**653**	**585**	**551**
Price-responsive	SDP-C	6	7	7	15	17	21	27	28	28	20	11	7
	SDP-R	0	0	0	29	67	120	184	181	166	73	3	0
	CPP-Large	8	8	8	17	17	16	16	17	17	18	8	8
	CPP-Medium	3	3	3	8	8	9	10	10	10	4	1	1
	CPP-Small	4	4	4	5	5	6	7	7	7	2	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**21**	**22**	**21**	**74**	**115**	**173**	**244**	**243**	**228**	**116**	**26**	**18**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	38	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**41**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**40**
SmartConnect®-enabled	SPD with Tech.	1	1	-4	16	17	22	28	28	28	21	-1	1
	SUB-TOTAL	**1**	**1**	**-4**	**16**	**17**	**22**	**28**	**28**	**28**	**21**	**-1**	**1**
Nonevent Based	RTP	0	0	0	0	0	-1	1	4	1	0	0	0
	PLS	0	0	0	0	5	5	6	6	6	5	0	0
	SUB-TOTAL	**0**	**0**	**0**	**0**	**5**	**4**	**7**	**9**	**7**	**5**	**0**	**0**
PORTFOLIO TOTAL		**622**	**633**	**628**	**751**	**839**	**911**	**987**	**1,007**	**963**	**850**	**650**	**611**

Table G-5: 2021 Portfolio Aggregate Ex Ante Load Impact Estimates for 1-in-2 CAISO System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	119	123	123	124	131	141	143	140	141	140	135	120
	BIP-30	405	408	404	436	466	455	452	470	447	460	417	399
	AP-I	23	25	30	44	54	54	52	51	42	37	23	23
	SUB-TOTAL	**546**	**557**	**558**	**603**	**651**	**650**	**647**	**661**	**630**	**637**	**575**	**542**
Price-responsive	SDP-C	6	6	6	14	16	19	24	26	26	18	10	7
	SDP-R	0	0	0	27	64	114	175	172	158	69	3	0
	CPP-Large	8	8	8	17	17	16	16	17	17	18	8	8
	CPP-Medium	1	1	1	3	3	4	4	4	4	4	1	1
	CPP-Small	2	2	2	2	2	3	3	3	3	2	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**16**	**17**	**17**	**63**	**102**	**156**	**222**	**222**	**208**	**111**	**25**	**18**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	38	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**41**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**40**
SmartConnect®-enabled	SPD with Tech.	1	1	-5	19	20	26	33	33	33	25	-1	2
	SUB-TOTAL	**1**	**1**	**-5**	**19**	**20**	**26**	**33**	**33**	**33**	**25**	**-1**	**2**
Nonevent Based	RTP	0	0	0	0	0	-1	1	4	1	0	0	0
	PLS	0	0	0	0	5	6	7	6	7	6	0	0
	SUB-TOTAL	**0**	**0**	**0**	**0**	**5**	**4**	**7**	**10**	**7**	**6**	**0**	**0**
PORTFOLIO TOTAL		**604**	**616**	**611**	**728**	**816**	**883**	**956**	**976**	**934**	**833**	**638**	**601**

Table G-6: 2022 Portfolio Aggregate Ex Ante Load Impact Estimates for 1-in-2 CAISO System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	117	122	122	122	129	140	141	140	140	140	135	120
	BIP-30	397	401	397	427	457	447	443	462	440	453	411	394
	AP-I	22	25	30	43	53	53	51	50	42	36	23	23
	SUB-TOTAL	**537**	**547**	**548**	**592**	**639**	**639**	**635**	**651**	**622**	**630**	**569**	**537**
Price-responsive	SDP-C	5	6	6	13	15	18	22	24	24	17	9	6
	SDP-R	0	0	0	26	61	108	166	163	150	66	3	0
	CPP-Large	8	8	8	17	17	16	16	17	17	18	8	8
	CPP-Medium	1	1	1	3	3	4	4	4	4	4	1	1
	CPP-Small	2	2	2	2	2	3	3	3	3	2	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**16**	**16**	**16**	**61**	**97**	**149**	**211**	**211**	**198**	**106**	**24**	**17**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	38	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**41**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**40**
SmartConnect®-enabled	SPD with Tech.	2	2	-5	21	23	29	38	38	38	29	-1	2
	SUB-TOTAL	**2**	**2**	**-5**	**21**	**23**	**29**	**38**	**38**	**38**	**29**	**-1**	**2**
Nonevent Based	RTP	0	0	0	0	0	-1	1	4	1	0	0	0
	PLS	0	0	0	0	6	6	7	7	7	6	0	0
	SUB-TOTAL	**0**	**0**	**0**	**0**	**6**	**5**	**7**	**10**	**7**	**6**	**0**	**0**
PORTFOLIO TOTAL		**595**	**607**	**600**	**717**	**803**	**869**	**939**	**961**	**921**	**825**	**632**	**595**

Table G-7: 2023 Portfolio Aggregate Ex Ante Load Impact Estimates for 1-in-2 CAISO System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	117	122	122	122	129	140	141	140	140	140	135	120
	BIP-30	394	397	393	425	455	445	443	462	440	453	411	394
	AP-I	22	25	29	43	52	53	51	50	42	36	23	23
	SUB-TOTAL	**533**	**543**	**544**	**590**	**637**	**638**	**635**	**651**	**622**	**630**	**569**	**537**
Price-responsive	SDP-C	5	5	5	12	13	16	21	22	22	15	8	6
	SDP-R	0	0	0	25	58	103	158	155	143	62	3	0
	CPP-Large	8	8	8	17	17	17	16	17	17	18	8	8
	CPP-Medium	1	1	1	3	3	4	4	4	4	4	1	1
	CPP-Small	2	2	2	2	2	3	3	3	3	2	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**15**	**16**	**16**	**59**	**93**	**142**	**201**	**201**	**188**	**101**	**23**	**17**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	38	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**41**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**40**
SmartConnect®-enabled	SPD with Tech.	2	2	-6	24	26	33	42	43	42	32	-1	2
	SUB-TOTAL	**2**	**2**	**-6**	**24**	**26**	**33**	**42**	**43**	**42**	**32**	**-1**	**2**
Nonevent Based	RTP	0	0	0	0	0	-1	1	4	1	0	0	0
	PLS	0	0	0	0	6	6	7	7	7	6	0	0
	SUB-TOTAL	**0**	**0**	**0**	**0**	**6**	**5**	**8**	**11**	**8**	**6**	**0**	**0**
PORTFOLIO TOTAL		**590**	**603**	**595**	**716**	**800**	**865**	**934**	**956**	**916**	**824**	**631**	**595**

Table G-8: 2024 Portfolio Aggregate Ex Ante Load Impact Estimates for 1-in-2 CAISO System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	117	122	122	122	129	140	141	140	140	140	135	120
	BIP-30	394	397	393	425	455	445	443	462	440	453	411	394
	AP-I	22	25	29	43	52	53	51	50	42	36	23	23
	SUB-TOTAL	**533**	**543**	**544**	**590**	**637**	**638**	**635**	**651**	**622**	**630**	**569**	**537**
Price-responsive	SDP-C	4	5	5	11	12	15	19	20	20	14	8	5
	SDP-R	0	0	0	23	55	98	150	147	135	59	3	0
	CPP-Large	8	8	8	17	17	17	16	17	17	18	8	8
	CPP-Medium	1	1	1	3	3	4	4	4	4	4	1	1
	CPP-Small	2	2	2	2	2	3	3	3	3	2	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**15**	**15**	**15**	**56**	**89**	**136**	**192**	**191**	**179**	**97**	**22**	**16**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	38	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**41**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**40**
SmartConnect®-enabled	SPD with Tech.	2	2	-7	27	29	37	47	48	47	36	-1	2
	SUB-TOTAL	**2**	**2**	**-7**	**27**	**29**	**37**	**47**	**48**	**47**	**36**	**-1**	**2**
Nonevent Based	RTP	0	0	0	0	0	-1	1	4	1	0	0	0
	PLS	0	0	0	0	6	6	7	7	7	6	0	0
	SUB-TOTAL	**0**	**0**	**0**	**0**	**6**	**5**	**8**	**11**	**8**	**6**	**0**	**0**
PORTFOLIO TOTAL		**590**	**603**	**594**	**717**	**800**	**862**	**929**	**951**	**912**	**823**	**630**	**595**

Table G-9: 2025 Portfolio Aggregate Ex Ante Load Impact Estimates for 1-in-2 CAISO System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	117	122	122	122	129	140	141	140	140	140	135	120
	BIP-30	394	397	393	425	455	445	443	462	440	453	411	394
	AP-I	22	25	29	43	52	53	51	50	42	36	23	23
	SUB-TOTAL	**533**	**543**	**544**	**590**	**637**	**638**	**635**	**651**	**622**	**630**	**569**	**537**
Price-responsive	SDP-C	4	4	4	10	11	14	17	18	18	13	7	5
	SDP-R	0	0	0	22	52	93	142	140	128	56	3	0
	CPP-Large	8	8	8	17	17	17	16	17	17	18	8	8
	CPP-Medium	1	1	1	3	3	4	4	4	4	4	1	1
	CPP-Small	2	2	2	2	2	3	3	3	3	2	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**15**	**15**	**15**	**54**	**85**	**129**	**182**	**182**	**171**	**93**	**21**	**16**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	38	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**41**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**40**
SmartConnect®-enabled	SPD with Tech.	2	2	-7	30	32	41	52	53	52	39	-1	2
	SUB-TOTAL	**2**	**2**	**-7**	**30**	**32**	**41**	**52**	**53**	**52**	**39**	**-1**	**2**
Nonevent Based	RTP	0	0	0	0	0	-1	1	4	1	0	0	0
	PLS	0	0	0	0	6	6	7	7	7	6	0	0
	SUB-TOTAL	**0**	**0**	**0**	**0**	**6**	**5**	**8**	**11**	**8**	**6**	**0**	**0**
PORTFOLIO TOTAL		**590**	**602**	**593**	**717**	**799**	**860**	**925**	**946**	**908**	**822**	**629**	**595**

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Table G-10: 2026 Portfolio Aggregate Ex Ante Load Impact Estimates for 1-in-2 CAISO System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	117	122	122	122	129	140	141	140	140	140	135	120
	BIP-30	394	397	393	425	455	445	443	462	440	453	411	394
	AP-I	22	25	29	43	52	53	51	50	42	36	23	23
	SUB-TOTAL	**533**	**543**	**544**	**590**	**637**	**638**	**635**	**651**	**622**	**630**	**569**	**537**
Price-responsive	SDP-C	4	4	4	9	10	13	16	17	17	12	6	4
	SDP-R	0	0	0	21	49	88	135	133	122	53	3	0
	CPP-Large	8	8	8	17	17	17	16	17	17	18	8	8
	CPP-Medium	1	1	1	3	3	4	4	4	4	4	1	1
	CPP-Small	2	2	2	2	2	3	3	3	3	2	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**14**	**15**	**15**	**52**	**82**	**123**	**174**	**174**	**163**	**89**	**21**	**15**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	38	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**41**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**40**
SmartConnect®-enabled	SPD with Tech.	2	2	-8	33	35	45	57	57	56	43	-1	3
	SUB-TOTAL	**2**	**2**	**-8**	**33**	**35**	**45**	**57**	**57**	**56**	**43**	**-1**	**3**
Nonevent Based	RTP	0	0	0	0	0	-1	1	4	1	0	0	0
	PLS	0	0	0	0	6	6	7	7	7	6	0	0
	SUB-TOTAL	**0**	**0**	**0**	**0**	**6**	**5**	**8**	**10**	**8**	**6**	**0**	**0**
PORTFOLIO TOTAL		**590**	**602**	**592**	**718**	**798**	**857**	**921**	**942**	**904**	**822**	**628**	**595**

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Table G-11: 2027 Portfolio Aggregate Ex Ante Load Impact Estimates for 1-in-2 CAISO System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	117	122	122	122	129	140	141	140	140	140	135	120
	BIP-30	394	397	393	425	455	445	443	462	440	453	411	394
	AP-I	22	25	29	43	52	53	51	50	42	36	23	23
	SUB-TOTAL	**533**	**543**	**544**	**590**	**637**	**638**	**635**	**651**	**622**	**630**	**569**	**537**
Price-responsive	SDP-C	3	4	4	8	9	11	14	15	15	11	6	4
	SDP-R	0	0	0	20	47	83	128	126	116	51	2	0
	CPP-Large	8	8	8	17	17	17	16	17	17	18	9	8
	CPP-Medium	1	1	1	3	3	4	4	4	4	4	1	1
	CPP-Small	2	2	2	2	2	3	3	3	3	2	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**14**	**14**	**14**	**51**	**78**	**118**	**165**	**165**	**155**	**85**	**20**	**15**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	38	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**41**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**40**
SmartConnect®-enabled	SPD with Tech.	3	3	-9	35	38	49	62	62	61	46	-1	3
	SUB-TOTAL	**3**	**3**	**-9**	**35**	**38**	**49**	**62**	**62**	**61**	**46**	**-1**	**3**
Nonevent Based	RTP	0	0	0	0	0	-1	1	4	1	0	0	0
	PLS	0	0	0	0	6	6	7	7	7	6	0	0
	SUB-TOTAL	**0**	**0**	**0**	**0**	**6**	**5**	**7**	**10**	**7**	**6**	**0**	**0**
PORTFOLIO TOTAL		**590**	**602**	**591**	**719**	**797**	**855**	**917**	**939**	**901**	**821**	**627**	**594**

Appendix H Portfolio Aggregate Ex Ante Load Impact Estimates for 1-in-10 CAISO System Conditions by Month and Forecast Year

Table H-1: 2017 Portfolio Aggregate Ex Ante Load Impact Estimates for 1-in-10 CAISO System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	105	117	131	123	137	147	149	149	149	149	145	121
	BIP-30	435	433	434	473	515	506	495	518	499	506	460	435
	AP-I	28	25	35	48	55	55	53	55	43	44	26	26
	SUB-TOTAL	**568**	**575**	**600**	**645**	**708**	**708**	**697**	**721**	**691**	**700**	**631**	**582**
Price-responsive	SDP-C	7	9	15	29	33	32	34	39	42	34	16	7
	SDP-R	0	0	16	126	170	192	221	247	253	170	31	0
	CPP-Large	7	8	8	18	17	16	15	16	16	18	9	8
	CPP-Medium	0	0	0	0	0	0	0	0	0	0	0	0
	CPP-Small	0	0	0	0	0	0	0	0	0	0	0	0
	DBP	4	4	4	5	5	5	5	6	6	5	5	4
	SUB-TOTAL	**18**	**21**	**43**	**178**	**225**	**245**	**276**	**308**	**316**	**226**	**60**	**19**
Demand Response Aggregator-managed	CBP-DA	1	1	1	1	1	1	2	2	2	2	1	1
	CBP-DO	24	25	25	26	23	28	28	29	33	32	24	24
	AMP	83	82	82	82	80	78	77	79	77	77	83	83
	SUB-TOTAL	**108**	**108**	**109**	**109**	**104**	**107**	**107**	**110**	**112**	**111**	**108**	**108**
SmartConnect®-enabled	SPD with Tech.	1	1	0	8	9	10	11	12	13	11	0	1
	SUB-TOTAL	**1**	**1**	**0**	**8**	**9**	**10**	**11**	**12**	**13**	**11**	**0**	**1**
Nonevent Based	RTP	0	0	0	2	0	1	1	4	6	2	0	0
	PLS	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*
	SUB-TOTAL	**0**	**0**	**0**	**2**	**0**	**1**	**1**	**4**	**6**	**2**	**0**	**0**
PORTFOLIO TOTAL		**695**	**705**	**751**	**942**	**1,045**	**1,071**	**1,091**	**1,155**	**1,138**	**1,050**	**799**	**710**

*Load impacts are redacted to protect confidential customer information

Table H-2: 2018 Portfolio Aggregate Ex Ante Load Impact Estimates for 1-in-10 CAISO System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	121	134	139	129	139	147	149	147	148	148	144	120
	BIP-30	435	433	432	470	509	499	488	508	490	498	451	427
	AP-I	29	26	35	49	56	56	53	55	44	45	26	26
	SUB-TOTAL	**585**	**593**	**606**	**648**	**705**	**702**	**690**	**710**	**681**	**690**	**621**	**573**
Price-responsive	SDP-C	6	8	14	27	30	30	31	36	39	31	15	7
	SDP-R	0	0	15	119	161	182	210	235	240	161	29	0
	CPP-Large	7	8	8	18	17	16	15	16	16	18	9	8
	CPP-Medium	0	0	0	0	0	0	0	0	0	4	1	1
	CPP-Small	0	0	0	0	0	0	0	0	0	1	0	0
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**14**	**16**	**37**	**165**	**209**	**228**	**257**	**287**	**295**	**215**	**55**	**16**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	39	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**42**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**39**
SmartConnect®-enabled	SPD with Tech.	1	1	0	15	16	17	19	20	22	19	0	2
	SUB-TOTAL	**1**	**1**	**0**	**15**	**16**	**17**	**19**	**20**	**22**	**19**	**0**	**2**
Nonevent Based	RTP	0	0	0	2	0	1	1	4	6	2	0	0
	PLS	0	0	0	0	4	4	4	4	5	4	0	0
	SUB-TOTAL	**0**	**0**	**0**	**2**	**4**	**4**	**5**	**8**	**10**	**6**	**0**	**0**
PORTFOLIO TOTAL		**641**	**652**	**685**	**872**	**972**	**998**	**1,018**	**1,076**	**1,065**	**984**	**715**	**630**

Table H-3: 2019 Portfolio Aggregate Ex Ante Load Impact Estimates for 1-in-10 CAISO System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	121	133	138	128	138	147	149	146	147	147	142	120
	BIP-30	426	424	424	460	497	487	476	496	478	485	440	416
	AP-I	29	26	35	49	57	56	53	55	44	45	26	26
	SUB-TOTAL	**576**	**583**	**597**	**637**	**691**	**690**	**678**	**697**	**668**	**676**	**609**	**562**
Price-responsive	SDP-C	6	8	13	25	28	28	29	34	36	29	14	6
	SDP-R	0	0	14	114	153	173	200	223	228	153	28	0
	CPP-Large	8	8	8	18	17	16	15	16	16	18	9	8
	CPP-Medium	1	1	1	4	4	4	4	4	4	10	4	3
	CPP-Small	0	0	0	1	1	1	1	1	1	6	4	4
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**15**	**17**	**37**	**161**	**203**	**222**	**249**	**278**	**285**	**216**	**58**	**21**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	39	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**42**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**39**
SmartConnect®-enabled	SPD with Tech.	2	2	0	19	21	21	24	25	27	23	0	2
	SUB-TOTAL	**2**	**2**	**0**	**19**	**21**	**21**	**24**	**25**	**27**	**23**	**0**	**2**
Nonevent Based	RTP	0	0	0	2	0	1	1	4	6	2	0	0
	PLS	0	0	0	0	5	5	6	6	6	5	0	0
	SUB-TOTAL	**0**	**0**	**0**	**2**	**5**	**6**	**6**	**9**	**12**	**7**	**0**	**0**
PORTFOLIO TOTAL		**632**	**643**	**676**	**862**	**958**	**986**	**1,005**	**1,060**	**1,049**	**977**	**707**	**625**

Table H-4: 2020 Portfolio Aggregate Ex Ante Load Impact Estimates for 1-in-10 CAISO System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	120	132	137	127	137	146	148	145	145	146	137	115
	BIP-30	416	412	413	450	487	479	467	486	468	475	431	408
	AP-I	29	26	35	49	56	56	53	55	43	45	26	26
	SUB-TOTAL	**565**	**570**	**585**	**626**	**680**	**680**	**668**	**686**	**657**	**666**	**595**	**549**
Price-responsive	SDP-C	5	7	12	23	26	25	27	31	33	27	13	6
	SDP-R	0	0	13	108	146	165	190	212	217	146	26	0
	CPP-Large	8	8	8	18	17	16	15	16	16	18	9	8
	CPP-Medium	3	3	4	9	9	10	10	11	11	4	1	1
	CPP-Small	5	4	4	6	6	7	7	8	8	3	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**20**	**22**	**41**	**164**	**204**	**223**	**250**	**278**	**285**	**197**	**51**	**16**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	39	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**42**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**39**
SmartConnect®-enabled	SPD with Tech.	2	2	0	23	25	26	28	31	33	28	0	2
	SUB-TOTAL	**2**	**2**	**0**	**23**	**25**	**26**	**28**	**31**	**33**	**28**	**0**	**2**
Nonevent Based	RTP	0	0	0	2	0	1	1	4	6	2	0	0
	PLS	0	0	0	0	5	6	6	6	6	6	0	0
	SUB-TOTAL	**0**	**0**	**0**	**2**	**5**	**6**	**7**	**10**	**12**	**8**	**0**	**0**
PORTFOLIO TOTAL		**628**	**636**	**669**	**858**	**953**	**982**	**1,001**	**1,054**	**1,043**	**952**	**686**	**607**

Table H-5: 2021 Portfolio Aggregate Ex Ante Load Impact Estimates for 1-in-10 CAISO System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	115	128	133	123	132	141	143	140	141	140	136	114
	BIP-30	407	405	406	440	479	469	458	477	460	466	423	401
	AP-I	29	25	35	49	55	55	52	54	43	44	25	25
	SUB-TOTAL	**551**	**559**	**573**	**612**	**666**	**665**	**653**	**671**	**643**	**649**	**584**	**540**
Price-responsive	SDP-C	5	6	11	21	24	23	25	29	30	25	12	5
	SDP-R	0	0	13	103	139	156	181	202	206	138	25	0
	CPP-Large	8	8	8	18	17	16	15	16	16	18	9	8
	CPP-Medium	1	1	1	4	4	4	4	4	4	4	1	1
	CPP-Small	2	2	2	2	3	3	3	3	3	3	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**15**	**17**	**35**	**148**	**186**	**203**	**228**	**254**	**260**	**187**	**49**	**16**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	39	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**42**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**39**
SmartConnect®-enabled	SPD with Tech.	2	2	0	27	30	30	33	36	38	32	1	3
	SUB-TOTAL	**2**	**2**	**0**	**27**	**30**	**30**	**33**	**36**	**38**	**32**	**1**	**3**
Nonevent Based	RTP	0	0	0	2	0	1	1	4	6	2	0	0
	PLS	0	0	0	0	6	6	7	7	7	6	0	0
	SUB-TOTAL	**0**	**0**	**0**	**2**	**6**	**7**	**7**	**10**	**13**	**8**	**0**	**0**
PORTFOLIO TOTAL		**609**	**620**	**650**	**832**	**926**	**952**	**969**	**1,021**	**1,011**	**931**	**673**	**598**

Table H-6: 2022 Portfolio Aggregate Ex Ante Load Impact Estimates for 1-in-10 CAISO System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	114	127	131	121	130	140	141	140	140	140	136	114
	BIP-30	400	398	398	431	469	461	449	468	452	459	418	396
	AP-I	28	25	34	48	55	54	51	53	42	43	25	25
	SUB-TOTAL	**542**	**550**	**563**	**600**	**654**	**654**	**642**	**661**	**634**	**642**	**578**	**535**
Price-responsive	SDP-C	4	6	10	20	22	22	23	26	28	23	11	5
	SDP-R	0	0	12	98	132	149	172	192	196	132	24	0
	CPP-Large	8	8	8	18	17	16	16	16	16	18	9	8
	CPP-Medium	1	1	1	4	4	4	4	4	4	4	1	1
	CPP-Small	2	2	2	2	3	3	3	3	3	3	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**15**	**17**	**34**	**141**	**177**	**193**	**217**	**242**	**248**	**179**	**47**	**15**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	39	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**42**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**39**
SmartConnect®-enabled	SPD with Tech.	3	3	0	31	34	35	38	41	44	37	1	3
	SUB-TOTAL	**3**	**3**	**0**	**31**	**34**	**35**	**38**	**41**	**44**	**37**	**1**	**3**
Nonevent Based	RTP	0	0	0	2	0	1	1	4	6	2	0	0
	PLS	0	0	0	0	6	6	7	7	7	7	0	0
	SUB-TOTAL	**0**	**0**	**0**	**2**	**6**	**7**	**7**	**11**	**13**	**8**	**0**	**0**
PORTFOLIO TOTAL		**600**	**611**	**639**	**818**	**909**	**936**	**952**	**1,004**	**995**	**920**	**665**	**593**

Table H-7: 2023 Portfolio Aggregate Ex Ante Load Impact Estimates for 1-in-10 CAISO System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	114	127	131	121	130	140	141	140	140	140	136	114
	BIP-30	396	394	395	429	467	459	449	468	452	459	418	396
	AP-I	28	25	34	48	54	54	51	53	42	43	25	25
	SUB-TOTAL	**538**	**545**	**560**	**598**	**652**	**652**	**642**	**661**	**634**	**642**	**578**	**535**
Price-responsive	SDP-C	4	5	9	18	20	20	21	24	26	21	10	4
	SDP-R	0	0	11	93	125	141	163	182	186	125	23	0
	CPP-Large	8	8	8	18	17	16	16	16	17	18	9	8
	CPP-Medium	1	1	1	4	4	4	4	4	4	4	1	1
	CPP-Small	2	2	2	2	3	3	3	3	3	3	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**15**	**16**	**32**	**135**	**169**	**184**	**207**	**230**	**236**	**170**	**44**	**15**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	39	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**42**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**39**
SmartConnect®-enabled	SPD with Tech.	3	3	0	35	38	40	43	46	49	41	1	3
	SUB-TOTAL	**3**	**3**	**0**	**35**	**38**	**40**	**43**	**46**	**49**	**41**	**1**	**3**
Nonevent Based	RTP	0	0	0	2	0	1	1	4	6	2	0	0
	PLS	0	0	0	0	6	7	7	8	8	7	0	0
	SUB-TOTAL	**0**	**0**	**0**	**2**	**7**	**7**	**8**	**11**	**13**	**9**	**0**	**0**
PORTFOLIO TOTAL		**596**	**607**	**634**	**814**	**904**	**930**	**947**	**998**	**989**	**917**	**663**	**593**

Table H-8: 2024 Portfolio Aggregate Ex Ante Load Impact Estimates for 1-in-10 CAISO System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	114	127	131	121	130	140	141	140	140	140	136	114
	BIP-30	396	394	395	429	467	459	449	468	452	459	418	396
	AP-I	28	25	34	48	54	54	51	53	42	43	25	25
	SUB-TOTAL	**538**	**545**	**560**	**598**	**652**	**652**	**642**	**661**	**634**	**642**	**578**	**535**
Price-responsive	SDP-C	4	5	8	17	18	18	19	22	24	19	9	4
	SDP-R	0	0	11	88	119	134	155	173	177	119	22	0
	CPP-Large	8	8	8	18	17	16	16	16	17	18	9	8
	CPP-Medium	1	1	1	4	4	4	4	4	4	4	1	1
	CPP-Small	2	2	2	2	3	3	3	3	3	3	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**14**	**16**	**31**	**129**	**161**	**175**	**197**	**219**	**224**	**162**	**43**	**15**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	39	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**42**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**39**
SmartConnect®-enabled	SPD with Tech.	3	3	0	40	43	44	48	51	55	46	1	4
	SUB-TOTAL	**3**	**3**	**0**	**40**	**43**	**44**	**48**	**51**	**55**	**46**	**1**	**4**
Nonevent Based	RTP	0	0	0	2	0	1	1	4	6	2	0	0
	PLS	0	0	0	0	7	7	7	8	8	7	0	0
	SUB-TOTAL	**0**	**0**	**0**	**2**	**7**	**7**	**8**	**11**	**14**	**9**	**0**	**0**
PORTFOLIO TOTAL		**596**	**607**	**633**	**812**	**900**	**926**	**942**	**992**	**983**	**914**	**661**	**593**

Table H-9: 2025 Portfolio Aggregate Ex Ante Load Impact Estimates for 1-in-10 CAISO System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	114	127	131	121	130	140	141	140	140	140	136	114
	BIP-30	396	394	395	429	467	459	449	468	452	459	418	396
	AP-I	28	25	34	48	54	54	51	53	42	43	25	25
	SUB-TOTAL	**538**	**545**	**560**	**598**	**652**	**652**	**642**	**661**	**634**	**642**	**578**	**535**
Price-responsive	SDP-C	3	5	8	15	17	17	17	20	22	17	8	4
	SDP-R	0	0	10	84	113	127	147	164	168	113	20	0
	CPP-Large	8	8	8	18	17	16	16	16	17	18	9	8
	CPP-Medium	1	1	1	4	4	4	4	4	4	4	1	1
	CPP-Small	2	2	2	2	3	3	3	3	3	3	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**14**	**15**	**30**	**123**	**153**	**167**	**187**	**208**	**213**	**155**	**41**	**14**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	39	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**42**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**39**
SmartConnect®-enabled	SPD with Tech.	4	4	0	44	47	49	53	57	60	51	1	4
	SUB-TOTAL	**4**	**4**	**0**	**44**	**47**	**49**	**53**	**57**	**60**	**51**	**1**	**4**
Nonevent Based	RTP	0	0	0	2	0	1	1	4	6	2	0	0
	PLS	0	0	0	0	6	7	7	7	8	7	0	0
	SUB-TOTAL	**0**	**0**	**0**	**2**	**6**	**7**	**8**	**11**	**13**	**9**	**0**	**0**
PORTFOLIO TOTAL		**596**	**607**	**631**	**810**	**897**	**922**	**937**	**987**	**977**	**910**	**660**	**593**

Table H-10: 2026 Portfolio Aggregate Ex Ante Load Impact Estimates for 1-in-10 CAISO System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	114	127	131	121	130	140	141	140	140	140	136	114
	BIP-30	396	394	395	429	467	459	449	468	452	459	418	396
	AP-I	28	25	34	48	54	54	51	53	42	43	25	25
	SUB-TOTAL	**538**	**545**	**560**	**598**	**652**	**652**	**642**	**661**	**634**	**642**	**578**	**535**
Price-responsive	SDP-C	3	4	7	14	15	15	16	18	20	16	8	3
	SDP-R	0	0	10	79	107	121	139	156	159	107	19	0
	CPP-Large	8	8	8	18	17	16	16	16	17	18	9	8
	CPP-Medium	1	1	1	4	4	4	4	4	4	4	1	1
	CPP-Small	2	2	2	2	3	3	3	3	3	3	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**14**	**15**	**28**	**117**	**146**	**159**	**178**	**198**	**203**	**147**	**39**	**14**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	39	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**42**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**39**
SmartConnect®-enabled	SPD with Tech.	4	4	0	48	52	53	58	62	66	55	1	5
	SUB-TOTAL	**4**	**4**	**0**	**48**	**52**	**53**	**58**	**62**	**66**	**55**	**1**	**5**
Nonevent Based	RTP	0	0	0	2	0	1	1	4	6	2	0	0
	PLS	0	0	0	0	6	6	7	7	7	7	0	0
	SUB-TOTAL	**0**	**0**	**0**	**2**	**6**	**7**	**8**	**11**	**13**	**8**	**0**	**0**
PORTFOLIO TOTAL		**596**	**607**	**630**	**808**	**894**	**918**	**933**	**981**	**972**	**908**	**658**	**593**

Table H-11: 2027 Portfolio Aggregate Ex Ante Load Impact Estimates for 1-in-10 CAISO System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	114	127	131	121	130	140	141	140	140	140	136	114
	BIP-30	396	394	395	429	467	459	449	468	452	459	418	396
	AP-I	28	25	34	48	54	54	51	53	42	43	25	25
	SUB-TOTAL	**538**	**545**	**560**	**598**	**652**	**652**	**642**	**661**	**634**	**642**	**578**	**535**
Price-responsive	SDP-C	3	4	6	13	14	14	14	17	18	14	7	3
	SDP-R	0	0	9	75	102	115	132	148	151	101	18	0
	CPP-Large	8	8	8	18	17	16	16	16	17	18	9	8
	CPP-Medium	1	1	1	4	4	4	4	4	4	4	1	1
	CPP-Small	2	2	2	2	3	3	3	3	3	3	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**14**	**15**	**27**	**112**	**139**	**151**	**170**	**188**	**193**	**140**	**37**	**14**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	39	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**42**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**39**
SmartConnect®-enabled	SPD with Tech.	5	5	0	52	56	58	63	67	71	60	1	5
	SUB-TOTAL	**5**	**5**	**0**	**52**	**56**	**58**	**63**	**67**	**71**	**60**	**1**	**5**
Nonevent Based	RTP	0	0	0	2	0	1	1	4	6	2	0	0
	PLS	0	0	0	0	6	6	7	7	7	6	0	0
	SUB-TOTAL	**0**	**0**	**0**	**2**	**6**	**7**	**7**	**11**	**13**	**8**	**0**	**0**
PORTFOLIO TOTAL		**596**	**607**	**629**	**807**	**891**	**915**	**929**	**977**	**968**	**905**	**656**	**593**

Appendix I Program-specific Aggregate Ex Ante Load Impact Estimates for 1-in-2 CAISO System Conditions by Month and Forecast Year

Table I-1: 2017 Program-specific Aggregate Ex Ante Load Impact Estimates for 1-in-2 CAISO System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	108	112	122	124	136	147	149	149	149	149	144	128
	BIP-30	432	437	433	469	502	490	489	511	486	500	453	433
	AP-I	22	25	30	43	53	54	52	51	43	37	24	24
	SUB-TOTAL	**562**	**574**	**584**	**636**	**691**	**692**	**690**	**711**	**677**	**686**	**621**	**584**
Price-responsive	SDP-C	8	8	9	19	22	27	34	36	35	25	14	9
	SDP-R	0	0	0	33	78	140	214	211	193	85	4	0
	CPP-Large	14	14	14	31	31	30	29	31	31	33	15	14
	CPP-Medium	0	0	0	0	0	0	0	0	0	0	0	0
	CPP-Small	0	0	0	0	0	0	0	0	0	0	0	0
	DBP	51	51	52	52	61	101	101	103	99	62	59	48
	SUB-TOTAL	**73**	**73**	**74**	**136**	**192**	**298**	**377**	**379**	**359**	**204**	**92**	**71**
Demand Response Aggregator-managed	CBP-DA	1	1	1	1	1	1	2	2	2	2	1	1
	CBP-DO	24	25	25	26	23	28	28	29	33	32	24	24
	AMP	83	82	82	82	80	78	77	79	77	77	83	83
	SUB-TOTAL	**108**	**108**	**108**	**109**	**104**	**107**	**107**	**110**	**112**	**111**	**108**	**108**
SmartConnect®-enabled	SPD with Tech.	0	0	-2	7	8	10	13	14	14	11	0	1
	SUB-TOTAL	**0**	**0**	**-2**	**7**	**8**	**10**	**13**	**14**	**14**	**11**	**0**	**1**
Nonevent Based	RTP	1	1	1	0	0	-7	2	17	2	0	1	1
	PLS	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*
	SUB-TOTAL	**1**	**1**	**1**	**0**	**0**	**-7**	**2**	**17**	**2**	**0**	**1**	**1**
PORTFOLIO TOTAL		**745**	**757**	**765**	**887**	**995**	**1,100**	**1,190**	**1,230**	**1,164**	**1,012**	**821**	**764**

*Load impacts are redacted to protect confidential customer information

Table I-2: 2018 Program-specific Aggregate Ex Ante Load Impact Estimates for 1-in-2 CAISO System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	125	129	129	130	138	147	149	147	148	148	143	127
	BIP-30	433	436	430	465	496	484	482	501	477	491	445	425
	AP-I	23	25	30	44	54	55	53	51	43	38	24	24
	SUB-TOTAL	**580**	**591**	**589**	**639**	**688**	**686**	**683**	**700**	**667**	**677**	**611**	**576**
Price-responsive	SDP-C	7	8	8	18	20	25	31	33	33	23	13	8
	SDP-R	0	0	0	32	74	133	203	200	184	80	4	0
	CPP-Large	14	14	14	31	31	30	29	31	32	33	15	15
	CPP-Medium	0	0	0	0	0	0	0	0	0	3	1	1
	CPP-Small	0	0	0	0	0	0	0	0	0	1	0	0
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**21**	**22**	**22**	**81**	**125**	**188**	**263**	**264**	**248**	**141**	**34**	**25**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	38	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**41**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**40**
SmartConnect®-enabled	SPD with Tech.	1	1	-2	10	11	14	18	19	19	14	0	1
	SUB-TOTAL	**1**	**1**	**-2**	**10**	**11**	**14**	**18**	**19**	**19**	**14**	**0**	**1**
Nonevent Based	RTP	1	1	1	0	0	-7	2	17	2	0	1	1
	PLS	0	0	0	0	3	4	4	4	4	4	0	0
	SUB-TOTAL	**1**	**1**	**1**	**0**	**3**	**-3**	**6**	**21**	**7**	**4**	**1**	**1**
PORTFOLIO TOTAL		**643**	**656**	**651**	**774**	**866**	**932**	**1,019**	**1,053**	**997**	**890**	**685**	**642**

Table I-3: 2019 Program-specific Aggregate Ex Ante Load Impact Estimates for 1-in-2 CAISO System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	124	128	128	129	137	147	149	146	147	147	141	126
	BIP-30	424	427	422	455	484	472	469	489	465	478	434	414
	AP-I	23	26	30	44	55	55	53	52	43	38	24	24
	SUB-TOTAL	**570**	**581**	**581**	**629**	**675**	**674**	**672**	**687**	**655**	**663**	**599**	**564**
Price-responsive	SDP-C	7	7	7	16	19	23	29	31	30	21	12	8
	SDP-R	0	0	0	30	70	126	193	190	175	77	4	0
	CPP-Large	14	14	14	31	31	30	29	31	32	33	15	15
	CPP-Medium	1	1	1	3	3	4	4	4	4	9	3	3
	CPP-Small	0	0	0	1	1	1	1	1	1	6	4	4
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**22**	**23**	**23**	**81**	**124**	**184**	**256**	**256**	**241**	**145**	**39**	**30**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	38	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**41**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**40**
SmartConnect®-enabled	SPD with Tech.	1	1	-3	13	14	18	23	24	24	18	-1	1
	SUB-TOTAL	**1**	**1**	**-3**	**13**	**14**	**18**	**23**	**24**	**24**	**18**	**-1**	**1**
Nonevent Based	RTP	1	1	1	0	0	-7	2	17	2	0	1	1
	PLS	0	0	0	0	4	5	6	5	6	5	0	0
	SUB-TOTAL	**1**	**1**	**1**	**0**	**5**	**-2**	**8**	**22**	**8**	**5**	**1**	**1**
PORTFOLIO TOTAL		**635**	**647**	**642**	**767**	**856**	**921**	**1,006**	**1,039**	**984**	**886**	**677**	**635**

Table I-4: 2020 Program-specific Aggregate Ex Ante Load Impact Estimates for 1-in-2 CAISO System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	123	127	127	128	136	146	148	145	145	146	136	122
	BIP-30	414	415	412	445	474	464	461	479	456	469	425	406
	AP-I	23	26	30	44	54	55	53	51	43	37	24	24
	SUB-TOTAL	**560**	**568**	**569**	**618**	**665**	**665**	**662**	**676**	**644**	**653**	**585**	**551**
Price-responsive	SDP-C	6	7	7	15	17	21	27	28	28	20	11	7
	SDP-R	0	0	0	29	67	120	184	181	166	73	3	0
	CPP-Large	14	14	14	31	31	30	29	31	32	33	15	15
	CPP-Medium	3	3	3	8	8	9	10	10	10	4	1	1
	CPP-Small	4	4	4	5	5	6	7	7	7	2	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**28**	**28**	**28**	**88**	**129**	**187**	**257**	**258**	**242**	**131**	**33**	**25**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	38	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**41**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**40**
SmartConnect®-enabled	SPD with Tech.	1	1	-4	16	17	22	28	28	28	21	-1	1
	SUB-TOTAL	**1**	**1**	**-4**	**16**	**17**	**22**	**28**	**28**	**28**	**21**	**-1**	**1**
Nonevent Based	RTP	1	1	1	0	0	-7	2	17	2	0	1	1
	PLS	0	0	0	0	5	5	6	6	6	5	0	0
	SUB-TOTAL	**1**	**1**	**1**	**0**	**5**	**-1**	**8**	**22**	**9**	**5**	**1**	**1**
PORTFOLIO TOTAL		**629**	**640**	**635**	**765**	**854**	**919**	**1,003**	**1,034**	**979**	**865**	**657**	**618**

Table I-5: 2021 Program-specific Aggregate Ex Ante Load Impact Estimates for 1-in-2 CAISO System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	119	123	123	124	131	141	143	140	141	140	135	120
	BIP-30	405	408	404	436	466	455	452	470	447	460	417	399
	AP-I	23	25	30	44	54	54	52	51	42	37	23	23
	SUB-TOTAL	**546**	**557**	**558**	**603**	**651**	**650**	**647**	**661**	**630**	**637**	**575**	**542**
Price-responsive	SDP-C	6	6	6	14	16	19	24	26	26	18	10	7
	SDP-R	0	0	0	27	64	114	175	172	158	69	3	0
	CPP-Large	14	14	14	31	31	31	29	31	32	33	16	15
	CPP-Medium	1	1	1	3	3	4	4	4	4	4	1	1
	CPP-Small	2	2	2	2	2	3	3	3	3	2	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**23**	**23**	**23**	**78**	**116**	**170**	**235**	**236**	**222**	**126**	**32**	**24**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	38	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**41**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**40**
SmartConnect®-enabled	SPD with Tech.	1	1	-5	19	20	26	33	33	33	25	-1	2
	SUB-TOTAL	**1**	**1**	**-5**	**19**	**20**	**26**	**33**	**33**	**33**	**25**	**-1**	**2**
Nonevent Based	RTP	1	1	1	0	0	-7	2	17	2	0	1	1
	PLS	0	0	0	0	5	6	7	6	7	6	0	0
	SUB-TOTAL	**1**	**1**	**1**	**0**	**5**	**-1**	**9**	**23**	**9**	**6**	**1**	**1**
PORTFOLIO TOTAL		**611**	**624**	**618**	**743**	**830**	**892**	**971**	**1,003**	**951**	**848**	**646**	**608**

Table I-6: 2022 Program-specific Aggregate Ex Ante Load Impact Estimates for 1-in-2 CAISO System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	117	122	122	122	129	140	141	140	140	140	135	120
	BIP-30	397	401	397	427	457	447	443	462	440	453	411	394
	AP-I	22	25	30	43	53	53	51	50	42	36	23	23
	SUB-TOTAL	**537**	**547**	**548**	**592**	**639**	**639**	**635**	**651**	**622**	**630**	**569**	**537**
Price-responsive	SDP-C	5	6	6	13	15	18	22	24	24	17	9	6
	SDP-R	0	0	0	26	61	108	166	163	150	66	3	0
	CPP-Large	14	14	14	31	31	31	29	31	32	33	16	15
	CPP-Medium	1	1	1	3	3	4	4	4	4	4	1	1
	CPP-Small	2	2	2	2	2	3	3	3	3	2	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**22**	**23**	**23**	**75**	**112**	**163**	**225**	**225**	**212**	**122**	**31**	**24**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	38	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**41**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**40**
SmartConnect®-enabled	SPD with Tech.	2	2	-5	21	23	29	38	38	38	29	-1	2
	SUB-TOTAL	**2**	**2**	**-5**	**21**	**23**	**29**	**38**	**38**	**38**	**29**	**-1**	**2**
Nonevent Based	RTP	1	1	1	0	0	-7	2	17	2	0	1	1
	PLS	0	0	0	0	6	6	7	7	7	6	0	0
	SUB-TOTAL	**1**	**1**	**1**	**0**	**6**	**-1**	**9**	**23**	**9**	**6**	**1**	**1**
PORTFOLIO TOTAL		**602**	**614**	**607**	**732**	**818**	**878**	**954**	**988**	**937**	**840**	**639**	**603**

Table I-7: 2023 Program-specific Aggregate Ex Ante Load Impact Estimates for 1-in-2 CAISO System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	117	122	122	122	129	140	141	140	140	140	135	120
	BIP-30	394	397	393	425	455	445	443	462	440	453	411	394
	AP-I	22	25	29	43	52	53	51	50	42	36	23	23
	SUB-TOTAL	**533**	**543**	**544**	**590**	**637**	**638**	**635**	**651**	**622**	**630**	**569**	**537**
Price-responsive	SDP-C	5	5	5	12	13	16	21	22	22	15	8	6
	SDP-R	0	0	0	25	58	103	158	155	143	62	3	0
	CPP-Large	14	14	14	31	31	31	29	31	32	34	16	15
	CPP-Medium	1	1	1	3	3	4	4	4	4	4	1	1
	CPP-Small	2	2	2	2	2	3	3	3	3	2	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**22**	**22**	**22**	**73**	**108**	**156**	**215**	**215**	**203**	**117**	**30**	**23**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	38	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**41**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**40**
SmartConnect®-enabled	SPD with Tech.	2	2	-6	24	26	33	42	43	42	32	-1	2
	SUB-TOTAL	**2**	**2**	**-6**	**24**	**26**	**33**	**42**	**43**	**42**	**32**	**-1**	**2**
Nonevent Based	RTP	1	1	1	0	0	-7	2	17	2	0	1	1
	PLS	0	0	0	0	6	6	7	7	7	6	0	0
	SUB-TOTAL	**1**	**1**	**1**	**0**	**6**	**0**	**10**	**24**	**10**	**6**	**1**	**1**
PORTFOLIO TOTAL		**597**	**610**	**602**	**731**	**815**	**874**	**950**	**983**	**933**	**840**	**638**	**602**

Table I-8: 2024 Program-specific Aggregate Ex Ante Load Impact Estimates for 1-in-2 CAISO System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	117	122	122	122	129	140	141	140	140	140	135	120
	BIP-30	394	397	393	425	455	445	443	462	440	453	411	394
	AP-I	22	25	29	43	52	53	51	50	42	36	23	23
	SUB-TOTAL	**533**	**543**	**544**	**590**	**637**	**638**	**635**	**651**	**622**	**630**	**569**	**537**
Price-responsive	SDP-C	4	5	5	11	12	15	19	20	20	14	8	5
	SDP-R	0	0	0	23	55	98	150	147	135	59	3	0
	CPP-Large	14	14	14	31	31	31	29	31	32	34	16	15
	CPP-Medium	1	1	1	3	3	4	4	4	4	4	1	1
	CPP-Small	2	2	2	2	2	3	3	3	3	2	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**22**	**22**	**22**	**71**	**104**	**150**	**205**	**206**	**194**	**113**	**29**	**23**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	38	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**41**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**40**
SmartConnect®-enabled	SPD with Tech.	2	2	-7	27	29	37	47	48	47	36	-1	2
	SUB-TOTAL	**2**	**2**	**-7**	**27**	**29**	**37**	**47**	**48**	**47**	**36**	**-1**	**2**
Nonevent Based	RTP	1	1	1	0	0	-7	2	17	2	0	1	1
	PLS	0	0	0	0	6	6	7	7	7	6	0	0
	SUB-TOTAL	**1**	**1**	**1**	**0**	**6**	**0**	**10**	**24**	**10**	**7**	**1**	**1**
PORTFOLIO TOTAL		**597**	**610**	**601**	**731**	**814**	**871**	**945**	**978**	**929**	**839**	**637**	**602**

Table I-9: 2025 Program-specific Aggregate Ex Ante Load Impact Estimates for 1-in-2 CAISO System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	117	122	122	122	129	140	141	140	140	140	135	120
	BIP-30	394	397	393	425	455	445	443	462	440	453	411	394
	AP-I	22	25	29	43	52	53	51	50	42	36	23	23
	SUB-TOTAL	**533**	**543**	**544**	**590**	**637**	**638**	**635**	**651**	**622**	**630**	**569**	**537**
Price-responsive	SDP-C	4	4	4	10	11	14	17	18	18	13	7	5
	SDP-R	0	0	0	22	52	93	142	140	128	56	3	0
	CPP-Large	14	14	14	32	31	31	30	31	32	34	16	15
	CPP-Medium	1	1	1	3	3	4	4	4	4	4	1	1
	CPP-Small	2	2	2	2	2	3	3	3	3	2	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**21**	**22**	**22**	**69**	**100**	**144**	**196**	**197**	**186**	**109**	**29**	**23**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	38	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**41**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**40**
SmartConnect®-enabled	SPD with Tech.	2	2	-7	30	32	41	52	53	52	39	-1	2
	SUB-TOTAL	**2**	**2**	**-7**	**30**	**32**	**41**	**52**	**53**	**52**	**39**	**-1**	**2**
Nonevent Based	RTP	1	1	1	0	0	-7	2	17	2	0	1	1
	PLS	0	0	0	0	6	6	7	7	7	6	0	0
	SUB-TOTAL	**1**	**1**	**1**	**0**	**6**	**0**	**10**	**23**	**10**	**6**	**1**	**1**
PORTFOLIO TOTAL		**597**	**610**	**600**	**732**	**813**	**869**	**940**	**974**	**925**	**838**	**637**	**602**

Table I-10: 2026 Program-specific Aggregate Ex Ante Load Impact Estimates for 1-in-2 CAISO System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	117	122	122	122	129	140	141	140	140	140	135	120
	BIP-30	394	397	393	425	455	445	443	462	440	453	411	394
	AP-I	22	25	29	43	52	53	51	50	42	36	23	23
	SUB-TOTAL	**533**	**543**	**544**	**590**	**637**	**638**	**635**	**651**	**622**	**630**	**569**	**537**
Price-responsive	SDP-C	4	4	4	9	10	13	16	17	17	12	6	4
	SDP-R	0	0	0	21	49	88	135	133	122	53	3	0
	CPP-Large	14	15	14	32	31	31	30	31	32	34	16	15
	CPP-Medium	1	1	1	3	3	4	4	4	4	4	1	1
	CPP-Small	2	2	2	2	2	3	3	3	3	2	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**21**	**21**	**21**	**67**	**96**	**138**	**187**	**188**	**178**	**105**	**28**	**22**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	38	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**41**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**40**
SmartConnect®-enabled	SPD with Tech.	2	2	-8	33	35	45	57	57	56	43	-1	3
	SUB-TOTAL	**2**	**2**	**-8**	**33**	**35**	**45**	**57**	**57**	**56**	**43**	**-1**	**3**
Nonevent Based	RTP	1	1	1	0	0	-7	2	17	2	0	1	1
	PLS	0	0	0	0	6	6	7	7	7	6	0	0
	SUB-TOTAL	**1**	**1**	**1**	**0**	**6**	**-1**	**9**	**23**	**9**	**6**	**1**	**1**
PORTFOLIO TOTAL		**597**	**609**	**599**	**733**	**813**	**866**	**936**	**970**	**921**	**838**	**636**	**602**

Table I-11: 2027 Program-specific Aggregate Ex Ante Load Impact Estimates for 1-in-2 CAISO System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	117	122	122	122	129	140	141	140	140	140	135	120
	BIP-30	394	397	393	425	455	445	443	462	440	453	411	394
	AP-I	22	25	29	43	52	53	51	50	42	36	23	23
	SUB-TOTAL	**533**	**543**	**544**	**590**	**637**	**638**	**635**	**651**	**622**	**630**	**569**	**537**
Price-responsive	SDP-C	3	4	4	8	9	11	14	15	15	11	6	4
	SDP-R	0	0	0	20	47	83	128	126	116	51	2	0
	CPP-Large	14	15	14	32	31	31	30	32	32	34	16	15
	CPP-Medium	1	1	1	3	3	4	4	4	4	4	1	1
	CPP-Small	2	2	2	2	2	3	3	3	3	2	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**21**	**21**	**21**	**65**	**93**	**132**	**179**	**180**	**170**	**101**	**27**	**22**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	38	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**41**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**40**
SmartConnect®-enabled	SPD with Tech.	3	3	-9	35	38	49	62	62	61	46	-1	3
	SUB-TOTAL	**3**	**3**	**-9**	**35**	**38**	**49**	**62**	**62**	**61**	**46**	**-1**	**3**
Nonevent Based	RTP	1	1	1	0	0	-7	2	17	2	0	1	1
	PLS	0	0	0	0	6	6	7	7	7	6	0	0
	SUB-TOTAL	**1**	**1**	**1**	**0**	**6**	**-1**	**9**	**23**	**9**	**6**	**1**	**1**
PORTFOLIO TOTAL		**597**	**609**	**598**	**734**	**812**	**864**	**933**	**966**	**918**	**837**	**635**	**602**

Appendix J Program-specific Ex Ante Load Impact Estimates for 1-in-10 CAISO System Conditions by Month and Forecast Year

Table J-1: 2017 Program-specific Aggregate Ex Ante Load Impact Estimates for 1-in-10 CAISO System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	105	117	131	123	137	147	149	149	149	149	145	121
	BIP-30	435	433	434	473	515	506	495	518	499	506	460	435
	AP-I	28	25	35	48	55	55	53	55	43	44	26	26
	SUB-TOTAL	**568**	**575**	**600**	**645**	**708**	**708**	**697**	**721**	**691**	**700**	**631**	**582**
Price-responsive	SDP-C	7	9	15	29	33	32	34	39	42	34	16	7
	SDP-R	0	0	16	126	170	192	221	247	253	170	31	0
	CPP-Large	14	14	15	33	31	30	28	30	30	33	16	14
	CPP-Medium	0	0	0	0	0	0	0	0	0	0	0	0
	CPP-Small	0	0	0	0	0	0	0	0	0	0	0	0
	DBP	49	49	54	53	62	102	101	103	99	62	59	47
	SUB-TOTAL	**70**	**73**	**100**	**241**	**296**	**355**	**385**	**419**	**423**	**299**	**122**	**69**
Demand Response Aggregator-managed	CBP-DA	1	1	1	1	1	1	2	2	2	2	1	1
	CBP-DO	24	25	25	26	23	28	28	29	33	32	24	24
	AMP	83	82	82	82	80	78	77	79	77	77	83	83
	SUB-TOTAL	**108**	**108**	**109**	**109**	**104**	**107**	**107**	**110**	**112**	**111**	**108**	**108**
SmartConnect®-enabled	SPD with Tech.	1	1	0	10	11	12	13	15	16	14	0	1
	SUB-TOTAL	**1**	**1**	**0**	**10**	**11**	**12**	**13**	**15**	**16**	**14**	**0**	**1**
Nonevent Based	RTP	1	1	1	9	0	2	2	17	23	9	1	1
	PLS	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*
	SUB-TOTAL	**1**	**1**	**1**	**9**	**0**	**2**	**2**	**17**	**23**	**9**	**1**	**1**
PORTFOLIO TOTAL		**748**	**758**	**809**	**1,013**	**1,118**	**1,185**	**1,204**	**1,281**	**1,265**	**1,131**	**862**	**760**

*Load impacts are redacted to protect confidential customer information

Table J-2: 2018 Program-specific Aggregate Ex Ante Load Impact Estimates for 1-in-10 CAISO System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	121	134	139	129	139	147	149	147	148	148	144	120
	BIP-30	435	433	432	470	509	499	488	508	490	498	451	427
	AP-I	29	26	35	49	56	56	53	55	44	45	26	26
	SUB-TOTAL	**585**	**593**	**606**	**648**	**705**	**702**	**690**	**710**	**681**	**690**	**621**	**573**
Price-responsive	SDP-C	6	8	14	27	30	30	31	36	39	31	15	7
	SDP-R	0	0	15	119	161	182	210	235	240	161	29	0
	CPP-Large	14	14	15	33	31	30	28	30	30	33	16	14
	CPP-Medium	0	0	0	0	0	0	0	0	0	4	1	1
	CPP-Small	0	0	0	0	0	0	0	0	0	1	0	0
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**20**	**23**	**44**	**180**	**223**	**242**	**270**	**301**	**309**	**230**	**62**	**22**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	39	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**42**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**39**
SmartConnect®-enabled	SPD with Tech.	1	1	0	15	16	17	19	20	22	19	0	2
	SUB-TOTAL	**1**	**1**	**0**	**15**	**16**	**17**	**19**	**20**	**22**	**19**	**0**	**2**
Nonevent Based	RTP	1	1	1	9	0	2	2	17	23	9	1	1
	PLS	0	0	0	0	4	4	4	4	5	4	0	0
	SUB-TOTAL	**1**	**1**	**1**	**9**	**4**	**6**	**7**	**21**	**27**	**13**	**1**	**1**
PORTFOLIO TOTAL		**647**	**659**	**692**	**894**	**986**	**1,014**	**1,033**	**1,103**	**1,095**	**1,006**	**723**	**637**

Table J-3: 2019 Program-specific Aggregate Ex Ante Load Impact Estimates for 1-in-10 CAISO System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	121	133	138	128	138	147	149	146	147	147	142	120
	BIP-30	426	424	424	460	497	487	476	496	478	485	440	416
	AP-I	29	26	35	49	57	56	53	55	44	45	26	26
	SUB-TOTAL	**576**	**583**	**597**	**637**	**691**	**690**	**678**	**697**	**668**	**676**	**609**	**562**
Price-responsive	SDP-C	6	8	13	25	28	28	29	34	36	29	14	6
	SDP-R	0	0	14	114	153	173	200	223	228	153	28	0
	CPP-Large	14	14	15	33	32	30	29	30	30	33	16	14
	CPP-Medium	1	1	1	4	4	4	4	4	4	10	4	3
	CPP-Small	0	0	0	1	1	1	1	1	1	6	4	4
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**21**	**24**	**44**	**176**	**218**	**235**	**262**	**292**	**299**	**231**	**66**	**28**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	39	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**42**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**39**
SmartConnect®-enabled	SPD with Tech.	2	2	0	19	21	21	24	25	27	23	0	2
	SUB-TOTAL	**2**	**2**	**0**	**19**	**21**	**21**	**24**	**25**	**27**	**23**	**0**	**2**
Nonevent Based	RTP	1	1	1	9	0	2	2	17	23	9	1	1
	PLS	0	0	0	0	5	5	6	6	6	5	0	0
	SUB-TOTAL	**1**	**1**	**1**	**9**	**5**	**8**	**8**	**22**	**28**	**14**	**1**	**1**
PORTFOLIO TOTAL		**639**	**650**	**684**	**884**	**973**	**1,001**	**1,020**	**1,087**	**1,080**	**999**	**715**	**632**

Table J-4: 2020 Program-specific Aggregate Ex Ante Load Impact Estimates for 1-in-10 CAISO System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	120	132	137	127	137	146	148	145	145	146	137	115
	BIP-30	416	412	413	450	487	479	467	486	468	475	431	408
	AP-I	29	26	35	49	56	56	53	55	43	45	26	26
	SUB-TOTAL	**565**	**570**	**585**	**626**	**680**	**680**	**668**	**686**	**657**	**666**	**595**	**549**
Price-responsive	SDP-C	5	7	12	23	26	25	27	31	33	27	13	6
	SDP-R	0	0	13	108	146	165	190	212	217	146	26	0
	CPP-Large	14	14	15	33	32	30	29	30	30	33	16	14
	CPP-Medium	3	3	4	9	9	10	10	11	11	4	2	1
	CPP-Small	5	4	4	6	6	7	7	8	8	3	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**27**	**29**	**48**	**179**	**219**	**237**	**263**	**292**	**299**	**212**	**58**	**23**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	39	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**42**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**39**
SmartConnect®-enabled	SPD with Tech.	2	2	0	23	25	26	28	31	33	28	0	2
	SUB-TOTAL	**2**	**2**	**0**	**23**	**25**	**26**	**28**	**31**	**33**	**28**	**0**	**2**
Nonevent Based	RTP	1	1	1	9	0	2	2	17	23	9	1	1
	PLS	0	0	0	0	5	6	6	6	6	6	0	0
	SUB-TOTAL	**1**	**1**	**1**	**9**	**6**	**8**	**8**	**23**	**29**	**14**	**1**	**1**
PORTFOLIO TOTAL		**635**	**643**	**676**	**880**	**968**	**998**	**1,016**	**1,081**	**1,074**	**974**	**693**	**614**

Table J-5: 2021 Program-specific Aggregate Ex Ante Load Impact Estimates for 1-in-10 CAISO System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	115	128	133	123	132	141	143	140	141	140	136	114
	BIP-30	407	405	406	440	479	469	458	477	460	466	423	401
	AP-I	29	25	35	49	55	55	52	54	43	44	25	25
	SUB-TOTAL	**551**	**559**	**573**	**612**	**666**	**665**	**653**	**671**	**643**	**649**	**584**	**540**
Price-responsive	SDP-C	5	6	11	21	24	23	25	29	30	25	12	5
	SDP-R	0	0	13	103	139	156	181	202	206	138	25	0
	CPP-Large	14	14	15	33	32	30	29	30	31	33	16	14
	CPP-Medium	1	1	1	4	4	4	4	4	4	4	2	1
	CPP-Small	2	2	2	2	3	3	3	3	3	3	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**22**	**24**	**42**	**163**	**201**	**217**	**241**	**268**	**275**	**203**	**56**	**22**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	39	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**42**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**39**
SmartConnect®-enabled	SPD with Tech.	2	2	0	27	30	30	33	36	38	32	1	3
	SUB-TOTAL	**2**	**2**	**0**	**27**	**30**	**30**	**33**	**36**	**38**	**32**	**1**	**3**
Nonevent Based	RTP	1	1	1	9	0	2	2	17	23	9	1	1
	PLS	0	0	0	0	6	6	7	7	7	6	0	0
	SUB-TOTAL	**1**	**1**	**1**	**9**	**6**	**8**	**9**	**23**	**29**	**15**	**1**	**1**
PORTFOLIO TOTAL		**616**	**627**	**658**	**854**	**940**	**968**	**984**	**1,048**	**1,042**	**954**	**681**	**605**

Table J-6: 2022 Program-specific Aggregate Ex Ante Load Impact Estimates for 1-in-10 CAISO System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	114	127	131	121	130	140	141	140	140	140	136	114
	BIP-30	400	398	398	431	469	461	449	468	452	459	418	396
	AP-I	28	25	34	48	55	54	51	53	42	43	25	25
	SUB-TOTAL	**542**	**550**	**563**	**600**	**654**	**654**	**642**	**661**	**634**	**642**	**578**	**535**
Price-responsive	SDP-C	4	6	10	20	22	22	23	26	28	23	11	5
	SDP-R	0	0	12	98	132	149	172	192	196	132	24	0
	CPP-Large	14	14	15	33	32	30	29	30	31	33	16	14
	CPP-Medium	1	1	1	4	4	4	4	4	4	4	2	1
	CPP-Small	2	2	2	2	3	3	3	3	3	3	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**22**	**23**	**41**	**156**	**192**	**207**	**230**	**256**	**262**	**194**	**54**	**22**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	39	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**42**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**39**
SmartConnect®-enabled	SPD with Tech.	3	3	0	31	34	35	38	41	44	37	1	3
	SUB-TOTAL	**3**	**3**	**0**	**31**	**34**	**35**	**38**	**41**	**44**	**37**	**1**	**3**
Nonevent Based	RTP	1	1	1	9	0	2	2	17	23	9	1	1
	PLS	0	0	0	0	6	6	7	7	7	7	0	0
	SUB-TOTAL	**1**	**1**	**1**	**9**	**6**	**9**	**9**	**24**	**30**	**15**	**1**	**1**
PORTFOLIO TOTAL		**607**	**618**	**646**	**840**	**924**	**952**	**967**	**1,031**	**1,026**	**943**	**673**	**600**

Table J-7: 2023 Program-specific Aggregate Ex Ante Load Impact Estimates for 1-in-10 CAISO System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	114	127	131	121	130	140	141	140	140	140	136	114
	BIP-30	396	394	395	429	467	459	449	468	452	459	418	396
	AP-I	28	25	34	48	54	54	51	53	42	43	25	25
	SUB-TOTAL	**538**	**545**	**560**	**598**	**652**	**652**	**642**	**661**	**634**	**642**	**578**	**535**
Price-responsive	SDP-C	4	5	9	18	20	20	21	24	26	21	10	4
	SDP-R	0	0	11	93	125	141	163	182	186	125	23	0
	CPP-Large	14	15	15	33	32	30	29	30	31	33	16	14
	CPP-Medium	1	1	1	4	4	4	4	4	4	4	2	1
	CPP-Small	2	2	2	2	3	3	3	3	3	3	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**21**	**23**	**39**	**150**	**184**	**198**	**220**	**244**	**250**	**186**	**52**	**22**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	39	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**42**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**39**
SmartConnect®-enabled	SPD with Tech.	3	3	0	35	38	40	43	46	49	41	1	3
	SUB-TOTAL	**3**	**3**	**0**	**35**	**38**	**40**	**43**	**46**	**49**	**41**	**1**	**3**
Nonevent Based	RTP	1	1	1	9	0	2	2	17	23	9	1	1
	PLS	0	0	0	0	6	7	7	8	8	7	0	0
	SUB-TOTAL	**1**	**1**	**1**	**9**	**7**	**9**	**10**	**24**	**30**	**15**	**1**	**1**
PORTFOLIO TOTAL		**603**	**614**	**641**	**836**	**919**	**946**	**962**	**1,025**	**1,020**	**939**	**671**	**600**

Table J-8: 2024 Program-specific Aggregate Ex Ante Load Impact Estimates for 1-in-10 CAISO System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	114	127	131	121	130	140	141	140	140	140	136	114
	BIP-30	396	394	395	429	467	459	449	468	452	459	418	396
	AP-I	28	25	34	48	54	54	51	53	42	43	25	25
	SUB-TOTAL	**538**	**545**	**560**	**598**	**652**	**652**	**642**	**661**	**634**	**642**	**578**	**535**
Price-responsive	SDP-C	4	5	8	17	18	18	19	22	24	19	9	4
	SDP-R	0	0	11	88	119	134	155	173	177	119	22	0
	CPP-Large	14	15	15	33	32	30	29	30	31	33	16	14
	CPP-Medium	1	1	1	4	4	4	4	4	4	4	2	1
	CPP-Small	2	2	2	2	3	3	3	3	3	3	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**21**	**23**	**38**	**144**	**176**	**189**	**210**	**233**	**238**	**178**	**50**	**21**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	39	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**42**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**39**
SmartConnect®-enabled	SPD with Tech.	3	3	0	40	43	44	48	51	55	46	1	4
	SUB-TOTAL	**3**	**3**	**0**	**40**	**43**	**44**	**48**	**51**	**55**	**46**	**1**	**4**
Nonevent Based	RTP	1	1	1	9	0	2	2	17	23	9	1	1
	PLS	0	0	0	0	7	7	7	8	8	7	0	0
	SUB-TOTAL	**1**	**1**	**1**	**9**	**7**	**9**	**10**	**24**	**30**	**16**	**1**	**1**
PORTFOLIO TOTAL		**603**	**614**	**640**	**834**	**915**	**942**	**957**	**1,019**	**1,014**	**936**	**669**	**600**

Table J-9: 2025 Program-specific Aggregate Ex Ante Load Impact Estimates for 1-in-10 CAISO System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	114	127	131	121	130	140	141	140	140	140	136	114
	BIP-30	396	394	395	429	467	459	449	468	452	459	418	396
	AP-I	28	25	34	48	54	54	51	53	42	43	25	25
	SUB-TOTAL	**538**	**545**	**560**	**598**	**652**	**652**	**642**	**661**	**634**	**642**	**578**	**535**
Price-responsive	SDP-C	3	5	8	15	17	17	17	20	22	17	8	4
	SDP-R	0	0	10	84	113	127	147	164	168	113	20	0
	CPP-Large	14	15	15	33	32	30	29	30	31	34	16	14
	CPP-Medium	1	1	1	4	4	4	4	4	4	4	2	1
	CPP-Small	2	2	2	2	3	3	3	3	3	3	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**21**	**22**	**37**	**138**	**168**	**181**	**201**	**222**	**228**	**170**	**48**	**21**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	39	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**42**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**39**
SmartConnect®-enabled	SPD with Tech.	4	4	0	44	47	49	53	57	60	51	1	4
	SUB-TOTAL	**4**	**4**	**0**	**44**	**47**	**49**	**53**	**57**	**60**	**51**	**1**	**4**
Nonevent Based	RTP	1	1	1	9	0	2	2	17	23	9	1	1
	PLS	0	0	0	0	6	7	7	7	8	7	0	0
	SUB-TOTAL	**1**	**1**	**1**	**9**	**7**	**9**	**10**	**24**	**30**	**15**	**1**	**1**
PORTFOLIO TOTAL		**603**	**614**	**639**	**832**	**912**	**938**	**952**	**1,014**	**1,008**	**933**	**667**	**600**

Table J-10: 2026 Program-specific Aggregate Ex Ante Load Impact Estimates for 1-in-10 CAISO System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	114	127	131	121	130	140	141	140	140	140	136	114
	BIP-30	396	394	395	429	467	459	449	468	452	459	418	396
	AP-I	28	25	34	48	54	54	51	53	42	43	25	25
	SUB-TOTAL	**538**	**545**	**560**	**598**	**652**	**652**	**642**	**661**	**634**	**642**	**578**	**535**
Price-responsive	SDP-C	3	4	7	14	15	15	16	18	20	16	8	3
	SDP-R	0	0	10	79	107	121	139	156	159	107	19	0
	CPP-Large	14	15	16	33	32	30	29	30	31	34	16	14
	CPP-Medium	1	1	1	4	4	4	4	4	4	4	2	1
	CPP-Small	2	2	2	2	3	3	3	3	3	3	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**20**	**22**	**36**	**133**	**161**	**173**	**192**	**212**	**217**	**163**	**46**	**21**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	39	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**42**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**39**
SmartConnect®-enabled	SPD with Tech.	4	4	0	48	52	53	58	62	66	55	1	5
	SUB-TOTAL	**4**	**4**	**0**	**48**	**52**	**53**	**58**	**62**	**66**	**55**	**1**	**5**
Nonevent Based	RTP	1	1	1	9	0	2	2	17	23	9	1	1
	PLS	0	0	0	0	6	6	7	7	7	7	0	0
	SUB-TOTAL	**1**	**1**	**1**	**9**	**6**	**9**	**9**	**24**	**30**	**15**	**1**	**1**
PORTFOLIO TOTAL		**603**	**614**	**638**	**831**	**909**	**934**	**948**	**1,008**	**1,003**	**930**	**666**	**600**

Table J-11: 2027 Program-specific Aggregate Ex Ante Load Impact Estimates for 1-in-10 CAISO System Conditions

Program Type	Program	Monthly System Peak											
		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Emergency	BIP-15	114	127	131	121	130	140	141	140	140	140	136	114
	BIP-30	396	394	395	429	467	459	449	468	452	459	418	396
	AP-I	28	25	34	48	54	54	51	53	42	43	25	25
	SUB-TOTAL	**538**	**545**	**560**	**598**	**652**	**652**	**642**	**661**	**634**	**642**	**578**	**535**
Price-responsive	SDP-C	3	4	6	13	14	14	14	17	18	14	7	3
	SDP-R	0	0	9	75	102	115	132	148	151	101	18	0
	CPP-Large	14	15	16	34	32	31	29	30	31	34	16	14
	CPP-Medium	1	1	1	4	4	4	4	4	4	4	2	1
	CPP-Small	2	2	2	2	3	3	3	3	3	3	2	2
	DBP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**20**	**21**	**34**	**127**	**154**	**166**	**183**	**203**	**207**	**156**	**45**	**21**
Demand Response Aggregator-managed	CBP-DA	3	3	3	3	3	4	5	5	6	6	3	3
	CBP-DO	37	38	39	40	35	43	43	45	51	49	36	36
	AMP	0	0	0	0	0	0	0	0	0	0	0	0
	SUB-TOTAL	**40**	**42**	**42**	**43**	**38**	**47**	**48**	**50**	**56**	**54**	**40**	**39**
SmartConnect®-enabled	SPD with Tech.	5	5	0	52	56	58	63	67	71	60	1	5
	SUB-TOTAL	**5**	**5**	**0**	**52**	**56**	**58**	**63**	**67**	**71**	**60**	**1**	**5**
Nonevent Based	RTP	1	1	1	9	0	2	2	17	23	9	1	1
	PLS	0	0	0	0	6	6	7	7	7	6	0	0
	SUB-TOTAL	**1**	**1**	**1**	**9**	**6**	**9**	**9**	**24**	**30**	**15**	**1**	**1**
PORTFOLIO TOTAL		**603**	**614**	**637**	**829**	**906**	**931**	**944**	**1,004**	**999**	**927**	**664**	**600**

Appendix K SCE Demand Response Program Capacity for Reliability-based Resources

CPUC D.10-06-034 approved a settlement agreement, adopted by the California investor-owned utilities (IOU) and parties to Rulemaking 07-01-041, which places an upper limit on the combined load capacity of those programs that the IOUs may use to meet their respective resource adequacy requirements, beginning in 2012. Tables K-1 through K-11 present summaries of SCE's reliability-based program capacity, comparing that capacity to SCE's share of the overall limit, consistent section C.2 of the settlement agreement.

SCE Demand Response Program Capacity for Reliability-based Resources

Table K-1: Portfolio-adjusted Load Impacts of Reliability Programs under 1-in-2 Weather Conditions – 2017

		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
1	BIP-15 Event Load Impacts Attributable to All Non-residential Customers Enrolled in BIP-15	109	121	129	120	136	147	148	149	149	150	142	123
2	BIP-30 Event Load Impacts Attributable to All Non-residential Customers Enrolled in BIP-30	432	437	433	469	502	490	489	511	486	500	453	433
3	AP-I Event Load Impacts Attributable to All Non-residential Customers Enrolled in AP-I	22	25	31	43	49	53	52	50	40	37	28	26
4	Load Impacts (BIP-15, BIP-30, and AP-I) Attributable Only to Customers Dually enrolled in Other Demand Response Programs	168	181	181	189	220	223	230	246	224	229	186	168
5	**Total Reliability Program Load Impacts MINUS Load Impacts Attributable to Customers Dually enrolled in Other Demand Response Programs (= (1) + (2) + (3) - (4))**	**395**	**402**	**411**	**442**	**467**	**468**	**459**	**464**	**451**	**458**	**437**	**413**
6	CAISO Control Area All-time Annual Coincident Peak Demand As of March 2017 (MW)[2]	50,270	50,270	50,270	50,270	50,270	50,270	50,270	50,270	50,270	50,270	50,270	50,270
7	Cap on Total Ex Ante Load Impacts of All Reliability DR Programs of PG&E, SCE, and SDG&E Combined as Percentage of CAISO Control Area All Time Annual Coincident Peak Demand	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
8	Tolerance Band	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
9	SCE Share of Cap on Reliability MW that Qualify for Resource Adequacy (=800 MW/(400 MW + 800 MW + 20 MW)	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%
10	**Cap on SCE BIP Load Impacts That Qualify for Resource Adequacy (MW) (= (6) x (7) x (100% +(8)) x (9))**	**659**	**659**	**659**	**659**	**659**	**659**	**659**	**659**	**659**	**659**	**659**	**659**
11	**Amount by which Total Reliability Program Load Impacts MINUS Load Impacts Attributable to Customers Dually enrolled in Other Demand Response Programs Exceeds Cap (= (5) - (10))**	**-264**	**-257**	**-248**	**-217**	**-192**	**-191**	**-200**	**-195**	**-208**	**-201**	**-222**	**-246**

Table K-2: Portfolio-adjusted Load Impacts of Reliability Programs under 1-in-2 Weather Conditions – 2018

		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
1	BIP-15 Event Load Impacts Attributable to All Non-residential Customers Enrolled in BIP-15	126	139	136	126	138	147	148	148	148	149	141	122
2	BIP-30 Event Load Impacts Attributable to All Non-residential Customers Enrolled in BIP-30	433	436	430	465	496	484	482	501	477	491	445	425
3	AP-I Event Load Impacts Attributable to All Non-residential Customers Enrolled in AP-I	22	26	32	44	50	54	52	50	41	38	28	26
4	Load Impacts (BIP-15, BIP-30, and AP-I) Attributable Only to Customers Dually enrolled in Other Demand Response Programs	172	185	184	187	218	222	228	242	221	226	183	166
5	**Total Reliability Program Load Impacts MINUS Load Impacts Attributable to Customers Dually enrolled in Other Demand Response Programs (= (1) + (2) + (3) - (4))**	**408**	**415**	**414**	**447**	**466**	**464**	**455**	**457**	**444**	**452**	**430**	**407**
6	CAISO Control Area All-time Annual Coincident Peak Demand As of March 2017 (MW)[2]	50,270	50,270	50,270	50,270	50,270	50,270	50,270	50,270	50,270	50,270	50,270	50,270
7	Cap on Total Ex Ante Load Impacts of All Reliability DR Programs of PG&E, SCE, and SDG&E Combined as Percentage of CAISO Control Area All Time Annual Coincident Peak Demand	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
8	Tolerance Band	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
9	SCE Share of Cap on Reliability MW that Qualify for Resource Adequacy (=800 MW/(400 MW + 800 MW + 20 MW)	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%
10	**Cap on SCE BIP Load Impacts That Qualify for Resource Adequacy (MW) (= (6) x (7) x (100% +(8)) x (9))**	**659**	**659**	**659**	**659**	**659**	**659**	**659**	**659**	**659**	**659**	**659**	**659**
11	**Amount by which Total Reliability Program Load Impacts MINUS Load Impacts Attributable to Customers Dually enrolled in Other Demand Response Programs Exceeds Cap (= (5) - (10))**	**-251**	**-244**	**-245**	**-212**	**-193**	**-195**	**-204**	**-202**	**-215**	**-207**	**-229**	**-252**

Table K-3: Portfolio-adjusted Load Impacts of Reliability Programs under 1-in-2 Weather Conditions – 2019

		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
1	BIP-15 Event Load Impacts Attributable to All Non-residential Customers Enrolled in BIP-15	125	138	135	125	137	147	148	146	147	147	139	121
2	BIP-30 Event Load Impacts Attributable to All Non-residential Customers Enrolled in BIP-30	424	427	422	455	484	472	469	489	465	478	434	414
3	AP-I Event Load Impacts Attributable to All Non-residential Customers Enrolled in AP-I	22	26	32	44	50	54	53	51	41	38	28	26
4	Load Impacts (BIP-15, BIP-30, and AP-I) Attributable Only to Customers Dually enrolled in Other Demand Response Programs	170	183	182	185	215	218	224	238	218	222	180	163
5	**Total Reliability Program Load Impacts MINUS Load Impacts Attributable to Customers Dually enrolled in Other Demand Response Programs (= (1) + (2) + (3) - (4))**	**401**	**408**	**408**	**439**	**456**	**455**	**446**	**448**	**435**	**442**	**421**	**398**
6	CAISO Control Area All-time Annual Coincident Peak Demand As of March 2017 (MW)[2]	50,270	50,270	50,270	50,270	50,270	50,270	50,270	50,270	50,270	50,270	50,270	50,270
7	Cap on Total Ex Ante Load Impacts of All Reliability DR Programs of PG&E, SCE, and SDG&E Combined as Percentage of CAISO Control Area All Time Annual Coincident Peak Demand	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
8	Tolerance Band	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
9	SCE Share of Cap on Reliability MW that Qualify for Resource Adequacy (=800 MW/(400 MW + 800 MW + 20 MW)	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%
10	**Cap on SCE BIP Load Impacts That Qualify for Resource Adequacy (MW) (= (6) x (7) x (100% +(8)) x (9))**	**659**	**659**	**659**	**659**	**659**	**659**	**659**	**659**	**659**	**659**	**659**	**659**
11	**Amount by which Total Reliability Program Load Impacts MINUS Load Impacts Attributable to Customers Dually enrolled in Other Demand Response Programs Exceeds Cap (= (5) - (10))**	**-258**	**-251**	**-251**	**-220**	**-203**	**-204**	**-213**	**-211**	**-224**	**-217**	**-238**	**-261**

Table K-4: Portfolio-adjusted Load Impacts of Reliability Programs under 1-in-2 Weather Conditions – 2020

		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
1	BIP-15 Event Load Impacts Attributable to All Non-residential Customers Enrolled in BIP-15	124	137	134	124	136	146	147	145	146	146	135	116
2	BIP-30 Event Load Impacts Attributable to All Non-residential Customers Enrolled in BIP-30	414	415	412	445	474	464	461	479	456	469	425	406
3	AP-I Event Load Impacts Attributable to All Non-residential Customers Enrolled in AP-I	22	26	32	44	50	54	52	50	40	38	28	26
4	Load Impacts (BIP-15, BIP-30, and AP-I) Attributable Only to Customers Dually enrolled in Other Demand Response Programs	167	179	179	182	211	215	221	234	214	219	178	161
5	**Total Reliability Program Load Impacts MINUS Load Impacts Attributable to Customers Dually enrolled in Other Demand Response Programs (= (1) + (2) + (3) - (4))**	**393**	**400**	**399**	**431**	**449**	**449**	**440**	**441**	**428**	**434**	**410**	**388**
6	CAISO Control Area All-time Annual Coincident Peak Demand As of March 2017 (MW)[2]	50,270	50,270	50,270	50,270	50,270	50,270	50,270	50,270	50,270	50,270	50,270	50,270
7	Cap on Total Ex Ante Load Impacts of All Reliability DR Programs of PG&E, SCE, and SDG&E Combined as Percentage of CAISO Control Area All Time Annual Coincident Peak Demand	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
8	Tolerance Band	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
9	SCE Share of Cap on Reliability MW that Qualify for Resource Adequacy (=800 MW/(400 MW + 800 MW + 20 MW)	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%
10	**Cap on SCE BIP Load Impacts That Qualify for Resource Adequacy (MW) (= (6) x (7) x (100% +(8)) x (9))**	**659**	**659**	**659**	**659**	**659**	**659**	**659**	**659**	**659**	**659**	**659**	**659**
11	**Amount by which Total Reliability Program Load Impacts MINUS Load Impacts Attributable to Customers Dually enrolled in Other Demand Response Programs Exceeds Cap (= (5) - (10))**	**-266**	**-259**	**-260**	**-228**	**-210**	**-210**	**-219**	**-218**	**-231**	**-225**	**-249**	**-271**

Table K-5: Portfolio-adjusted Load Impacts of Reliability Programs under 1-in-2 Weather Conditions – 2021

		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
1	BIP-15 Event Load Impacts Attributable to All Non-residential Customers Enrolled in BIP-15	119	133	130	120	131	142	142	140	141	141	133	115
2	BIP-30 Event Load Impacts Attributable to All Non-residential Customers Enrolled in BIP-30	405	408	404	436	466	455	452	470	447	460	417	399
3	AP-I Event Load Impacts Attributable to All Non-residential Customers Enrolled in AP-I	22	26	31	44	49	53	52	50	40	37	27	25
4	Load Impacts (BIP-15, BIP-30, and AP-I) Attributable Only to Customers Dually enrolled in Other Demand Response Programs	164	176	177	178	207	211	217	230	210	210	170	154
5	**Total Reliability Program Load Impacts MINUS Load Impacts Attributable to Customers Dually enrolled in Other Demand Response Programs (= (1) + (2) + (3) - (4))**	**383**	**390**	**390**	**421**	**439**	**439**	**429**	**431**	**418**	**427**	**407**	**385**
6	CAISO Control Area All-time Annual Coincident Peak Demand As of March 2017 (MW)[2]	50,270	50,270	50,270	50,270	50,270	50,270	50,270	50,270	50,270	50,270	50,270	50,270
7	Cap on Total Ex Ante Load Impacts of All Reliability DR Programs of PG&E, SCE, and SDG&E Combined as Percentage of CAISO Control Area All Time Annual Coincident Peak Demand	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
8	Tolerance Band	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
9	SCE Share of Cap on Reliability MW that Qualify for Resource Adequacy (=800 MW/(400 MW + 800 MW + 20 MW)	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%
10	**Cap on SCE BIP Load Impacts That Qualify for Resource Adequacy (MW) (= (6) x (7) x (100% +(8)) x (9))**	**659**	**659**	**659**	**659**	**659**	**659**	**659**	**659**	**659**	**659**	**659**	**659**
11	**Amount by which Total Reliability Program Load Impacts MINUS Load Impacts Attributable to Customers Dually enrolled in Other Demand Response Programs Exceeds Cap (= (5) - (10))**	**-276**	**-269**	**-269**	**-238**	**-220**	**-220**	**-230**	**-228**	**-241**	**-232**	**-252**	**-274**

Table K-6: Portfolio-adjusted Load Impacts of Reliability Programs under 1-in-2 Weather Conditions – 2022

		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
1	BIP-15 Event Load Impacts Attributable to All Non-residential Customers Enrolled in BIP-15	118	131	129	118	129	140	141	140	140	141	133	115
2	BIP-30 Event Load Impacts Attributable to All Non-residential Customers Enrolled in BIP-30	397	401	397	427	457	447	443	462	440	453	411	394
3	AP-I Event Load Impacts Attributable to All Non-residential Customers Enrolled in AP-I	22	25	31	43	49	52	51	49	39	36	27	25
4	Load Impacts (BIP-15, BIP-30, and AP-I) Attributable Only to Customers Dually enrolled in Other Demand Response Programs	158	170	171	173	201	204	210	223	205	209	169	154
5	**Total Reliability Program Load Impacts MINUS Load Impacts Attributable to Customers Dually enrolled in Other Demand Response Programs (= (1) + (2) + (3) - (4))**	**379**	**387**	**386**	**415**	**434**	**435**	**424**	**428**	**415**	**421**	**402**	**380**
6	CAISO Control Area All-time Annual Coincident Peak Demand As of March 2017 (MW)[2]	50,270	50,270	50,270	50,270	50,270	50,270	50,270	50,270	50,270	50,270	50,270	50,270
7	Cap on Total Ex Ante Load Impacts of All Reliability DR Programs of PG&E, SCE, and SDG&E Combined as Percentage of CAISO Control Area All Time Annual Coincident Peak Demand	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
8	Tolerance Band	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
9	SCE Share of Cap on Reliability MW that Qualify for Resource Adequacy (=800 MW/(400 MW + 800 MW + 20 MW)	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%
10	**Cap on SCE BIP Load Impacts That Qualify for Resource Adequacy (MW) (= (6) x (7) x (100% +(8)) x (9))**	**659**	**659**	**659**	**659**	**659**	**659**	**659**	**659**	**659**	**659**	**659**	**659**
11	**Amount by which Total Reliability Program Load Impacts MINUS Load Impacts Attributable to Customers Dually enrolled in Other Demand Response Programs Exceeds Cap (= (5) - (10))**	**-280**	**-272**	**-273**	**-244**	**-225**	**-224**	**-235**	**-231**	**-244**	**-238**	**-257**	**-279**

Table K-7: Portfolio-adjusted Load Impacts of Reliability Programs under 1-in-2 Weather Conditions – 2023

		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
1	BIP-15 Event Load Impacts Attributable to All Non-residential Customers Enrolled in BIP-15	118	131	129	118	129	140	141	140	140	141	133	115
2	BIP-30 Event Load Impacts Attributable to All Non-residential Customers Enrolled in BIP-30	394	397	393	425	455	445	443	462	440	453	411	394
3	AP-I Event Load Impacts Attributable to All Non-residential Customers Enrolled in AP-I	22	25	31	43	48	52	51	49	39	36	27	25
4	Load Impacts (BIP-15, BIP-30, and AP-I) Attributable Only to Customers Dually enrolled in Other Demand Response Programs	157	169	169	173	201	204	210	223	205	209	169	154
5	**Total Reliability Program Load Impacts MINUS Load Impacts Attributable to Customers Dually enrolled in Other Demand Response Programs (= (1) + (2) + (3) - (4))**	**376**	**384**	**383**	**413**	**432**	**433**	**424**	**428**	**415**	**421**	**402**	**380**
6	CAISO Control Area All-time Annual Coincident Peak Demand As of March 2017 (MW)[2]	50,270	50,270	50,270	50,270	50,270	50,270	50,270	50,270	50,270	50,270	50,270	50,270
7	Cap on Total Ex Ante Load Impacts of All Reliability DR Programs of PG&E, SCE, and SDG&E Combined as Percentage of CAISO Control Area All Time Annual Coincident Peak Demand	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
8	Tolerance Band	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
9	SCE Share of Cap on Reliability MW that Qualify for Resource Adequacy (=800 MW/(400 MW + 800 MW + 20 MW)	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%
10	**Cap on SCE BIP Load Impacts That Qualify for Resource Adequacy (MW) (= (6) x (7) x (100% +(8)) x (9))**	**659**	**659**	**659**	**659**	**659**	**659**	**659**	**659**	**659**	**659**	**659**	**659**
11	**Amount by which Total Reliability Program Load Impacts MINUS Load Impacts Attributable to Customers Dually enrolled in Other Demand Response Programs Exceeds Cap (= (5) - (10))**	**-283**	**-275**	**-276**	**-246**	**-227**	**-226**	**-235**	**-231**	**-244**	**-238**	**-257**	**-279**

Table K-8: Portfolio-adjusted Load Impacts of Reliability Programs under 1-in-2 Weather Conditions – 2024

		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
1	BIP-15 Event Load Impacts Attributable to All Non-residential Customers Enrolled in BIP-15	118	131	129	118	129	140	141	140	140	141	133	115
2	BIP-30 Event Load Impacts Attributable to All Non-residential Customers Enrolled in BIP-30	394	397	393	425	455	445	443	462	440	453	411	394
3	AP-I Event Load Impacts Attributable to All Non-residential Customers Enrolled in AP-I	22	25	31	43	48	52	51	49	39	36	27	25
4	Load Impacts (BIP-15, BIP-30, and AP-I) Attributable Only to Customers Dually enrolled in Other Demand Response Programs	157	169	169	173	201	204	210	223	205	209	169	154
5	**Total Reliability Program Load Impacts MINUS Load Impacts Attributable to Customers Dually enrolled in Other Demand Response Programs (= (1) + (2) + (3) - (4))**	**376**	**384**	**383**	**413**	**432**	**433**	**424**	**428**	**415**	**421**	**402**	**380**
6	CAISO Control Area All-time Annual Coincident Peak Demand As of March 2017 (MW)[2]	50,270	50,270	50,270	50,270	50,270	50,270	50,270	50,270	50,270	50,270	50,270	50,270
7	Cap on Total Ex Ante Load Impacts of All Reliability DR Programs of PG&E, SCE, and SDG&E Combined as Percentage of CAISO Control Area All Time Annual Coincident Peak Demand	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
8	Tolerance Band	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
9	SCE Share of Cap on Reliability MW that Qualify for Resource Adequacy (=800 MW/(400 MW + 800 MW + 20 MW)	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%
10	**Cap on SCE BIP Load Impacts That Qualify for Resource Adequacy (MW) (= (6) x (7) x (100% +(8)) x (9))**	**659**	**659**	**659**	**659**	**659**	**659**	**659**	**659**	**659**	**659**	**659**	**659**
11	**Amount by which Total Reliability Program Load Impacts MINUS Load Impacts Attributable to Customers Dually enrolled in Other Demand Response Programs Exceeds Cap (= (5) - (10))**	**-283**	**-275**	**-276**	**-246**	**-227**	**-226**	**-235**	**-231**	**-244**	**-238**	**-257**	**-279**

Table K-9: Portfolio-adjusted Load Impacts of Reliability Programs under 1-in-2 Weather Conditions – 2025

		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
1	BIP-15 Event Load Impacts Attributable to All Non-residential Customers Enrolled in BIP-15	118	131	129	118	129	140	141	140	140	141	133	115
2	BIP-30 Event Load Impacts Attributable to All Non-residential Customers Enrolled in BIP-30	394	397	393	425	455	445	443	462	440	453	411	394
3	AP-I Event Load Impacts Attributable to All Non-residential Customers Enrolled in AP-I	22	25	31	43	48	52	51	49	39	36	27	25
4	Load Impacts (BIP-15, BIP-30, and AP-I) Attributable Only to Customers Dually enrolled in Other Demand Response Programs	157	169	169	173	201	204	210	223	205	209	169	154
5	**Total Reliability Program Load Impacts MINUS Load Impacts Attributable to Customers Dually enrolled in Other Demand Response Programs (= (1) + (2) + (3) - (4))**	**376**	**384**	**383**	**413**	**432**	**433**	**424**	**428**	**415**	**421**	**402**	**380**
6	CAISO Control Area All-time Annual Coincident Peak Demand As of March 2017 (MW)[2]	50,270	50,270	50,270	50,270	50,270	50,270	50,270	50,270	50,270	50,270	50,270	50,270
7	Cap on Total Ex Ante Load Impacts of All Reliability DR Programs of PG&E, SCE, and SDG&E Combined as Percentage of CAISO Control Area All Time Annual Coincident Peak Demand	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
8	Tolerance Band	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
9	SCE Share of Cap on Reliability MW that Qualify for Resource Adequacy (=800 MW/(400 MW + 800 MW + 20 MW)	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%
10	**Cap on SCE BIP Load Impacts That Qualify for Resource Adequacy (MW) (= (6) x (7) x (100% +(8)) x (9))**	**659**	**659**	**659**	**659**	**659**	**659**	**659**	**659**	**659**	**659**	**659**	**659**
11	**Amount by which Total Reliability Program Load Impacts MINUS Load Impacts Attributable to Customers Dually enrolled in Other Demand Response Programs Exceeds Cap (= (5) - (10))**	**-283**	**-275**	**-276**	**-246**	**-227**	**-226**	**-235**	**-231**	**-244**	**-238**	**-257**	**-279**

Table K-10: Portfolio-adjusted Load Impacts of Reliability Programs under 1-in-2 Weather Conditions – 2026

		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
1	BIP-15 Event Load Impacts Attributable to All Non-residential Customers Enrolled in BIP-15	118	131	129	118	129	140	141	140	140	141	133	115
2	BIP-30 Event Load Impacts Attributable to All Non-residential Customers Enrolled in BIP-30	394	397	393	425	455	445	443	462	440	453	411	394
3	AP-I Event Load Impacts Attributable to All Non-residential Customers Enrolled in AP-I	22	25	31	43	48	52	51	49	39	36	27	25
4	Load Impacts (BIP-15, BIP-30, and AP-I) Attributable Only to Customers Dually enrolled in Other Demand Response Programs	157	169	169	173	201	204	210	223	205	209	169	154
5	**Total Reliability Program Load Impacts MINUS Load Impacts Attributable to Customers Dually enrolled in Other Demand Response Programs (= (1) + (2) + (3) - (4))**	**376**	**384**	**383**	**413**	**432**	**433**	**424**	**428**	**415**	**421**	**402**	**380**
6	CAISO Control Area All-time Annual Coincident Peak Demand As of March 2017 (MW)[2]	50,270	50,270	50,270	50,270	50,270	50,270	50,270	50,270	50,270	50,270	50,270	50,270
7	Cap on Total Ex Ante Load Impacts of All Reliability DR Programs of PG&E, SCE, and SDG&E Combined as Percentage of CAISO Control Area All Time Annual Coincident Peak Demand	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
8	Tolerance Band	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
9	SCE Share of Cap on Reliability MW that Qualify for Resource Adequacy (=800 MW/(400 MW + 800 MW + 20 MW)	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%
10	**Cap on SCE BIP Load Impacts That Qualify for Resource Adequacy (MW) (= (6) x (7) x (100% +(8)) x (9))**	**659**	**659**	**659**	**659**	**659**	**659**	**659**	**659**	**659**	**659**	**659**	**659**
11	**Amount by which Total Reliability Program Load Impacts MINUS Load Impacts Attributable to Customers Dually enrolled in Other Demand Response Programs Exceeds Cap (= (5) - (10))**	**-283**	**-275**	**-276**	**-246**	**-227**	**-226**	**-235**	**-231**	**-244**	**-238**	**-257**	**-279**

Table K-11: Portfolio-adjusted Load Impacts of Reliability Programs under 1-in-2 Weather Conditions – 2027

		Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
1	BIP-15 Event Load Impacts Attributable to All Non-residential Customers Enrolled in BIP-15	118	131	129	118	129	140	141	140	140	141	133	115
2	BIP-30 Event Load Impacts Attributable to All Non-residential Customers Enrolled in BIP-30	394	397	393	425	455	445	443	462	440	453	411	394
3	AP-I Event Load Impacts Attributable to All Non-residential Customers Enrolled in AP-I	22	25	31	43	48	52	51	49	39	36	27	25
4	Load Impacts (BIP-15, BIP-30, and AP-I) Attributable Only to Customers Dually enrolled in Other Demand Response Programs	157	169	169	173	201	204	210	223	205	209	169	154
5	**Total Reliability Program Load Impacts MINUS Load Impacts Attributable to Customers Dually enrolled in Other Demand Response Programs (= (1) + (2) + (3) - (4))**	**376**	**384**	**383**	**413**	**432**	**433**	**424**	**428**	**415**	**421**	**402**	**380**
6	CAISO Control Area All-time Annual Coincident Peak Demand As of March 2017 (MW)[2]	50,270	50,270	50,270	50,270	50,270	50,270	50,270	50,270	50,270	50,270	50,270	50,270
7	Cap on Total Ex Ante Load Impacts of All Reliability DR Programs of PG&E, SCE, and SDG&E Combined as Percentage of CAISO Control Area All Time Annual Coincident Peak Demand	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
8	Tolerance Band	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
9	SCE Share of Cap on Reliability MW that Qualify for Resource Adequacy (=800 MW/(400 MW + 800 MW + 20 MW)	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%	65.57%
10	**Cap on SCE BIP Load Impacts That Qualify for Resource Adequacy (MW) (= (6) x (7) x (100% +(8)) x (9))**	**659**	**659**	**659**	**659**	**659**	**659**	**659**	**659**	**659**	**659**	**659**	**659**
11	**Amount by which Total Reliability Program Load Impacts MINUS Load Impacts Attributable to Customers Dually enrolled in Other Demand Response Programs Exceeds Cap (= (5) - (10))**	**-283**	**-275**	**-276**	**-246**	**-227**	**-226**	**-235**	**-231**	**-244**	**-238**	**-257**	**-279**

Appendix B

SCE Notice of Availability (NOA) Served April 3, 2017

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE

STATE OF CALIFORNIA

Order Instituting Rulemaking To Enhance The Role Of Demand Response In Meeting The State's Resource Planning Needs And Operational Requirements.	R.13-09-011 (Filed September 19, 2013)

NOTICE OF AVAILABILITY OF SOUTHERN CALIFORNIA EDISON COMPANY'S (U 338-E) POSTING OF FINAL LOAD IMPACT REPORTS

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Dated: **April 3, 2017**

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE

STATE OF CALIFORNIA

Order Instituting Rulemaking To Enhance The Role Of Demand Response In Meeting The State's Resource Planning Needs And Operational Requirements.	R.13-09-011 (Filed September 19, 2013)

NOTICE OF AVAILABILITY OF SOUTHERN CALIFORNIA EDISON COMPANY'S (U 338-E) POSTING OF FINAL LOAD IMPACT REPORTS

Southern California Edison Company (SCE) hereby provides this Notice of Availability (NOA) of its posting of Program Year 2016 Final Demand Response (DR) Load Impact Reports pursuant to Rule 1.9 of the Rules of Practice and Procedure of the California Public Utilities Commission (CPUC or Commission), and in compliance with Commission Decisions (D.)08-04-050 and D.10-04-006.

SCE will be filing an amended report for the Base Interruptible Program as the original forecast of enrollments did not include 50 service accounts (SAs) that have been or will be added to the program due to participation in BIP aggregation. SCE's BIP does not usually have such a large increase in service account enrollments, so this increase coupled with the fact that SCE estimates we have reached our reliability cap is why an amended report will be filed.

SCE will also be filing an amended report for Save Power Day and Summer Discount Plan. During the analysis of the load impacts the internal and vendor quality control processes discovered that interval data was missing for both participant and non-participant (used for

baseline calculations) customers for both programs. This issue has affected approximately 6,000 customer accounts and/or whole dates depending on event. SCE's Information Technology team has been working to recover and verify the missing interval data. This task has recently been completed but was too late to be included in the final report. SCE and its vendor have, however, concluded that the missing data should not and has not had a meaningful impact on the reported ex post and ex ante impacts.

SCE hereby provides notice to the service list in proceeding R.13-09-011[1] and the members of the Demand Response Measurement Evaluation Committee (DRMEC) that the final DR Load Impact Reports for program year 2016, with appendices and/or supporting tables, are available on SCE's website.

The executive summary report of SCE's annual study of DR activities, entitled "Southern California Edison's 2016 Demand Response Portfolio Summary Report," including final summary tables, has been filed with the Commission, as well as posted on SCE's website. In addition, the public versions[2] of the reports and supporting tables for each of the following SCE-specific DR programs have been posted on SCE's website:

1. *PY 2016 Load Impact Evaluation of Southern California Edison's Residential Summer Discount Plan – Final Report;*

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[1] Pursuant to the March 13, 2014 Email Ruling of ALJ Hymes directing the utilities to file their annual load impact reports in R.13-09-011 as the successor proceeding to R.07-01-041.

[2] Some of the information contained in certain reports or supporting tables (for both the SCE-specific and Statewide reports) is confidential. For the public versions of such reports and tables, documents that are confidential in-part will be redacted, and documents that are wholly confidential will be replaced with a "placeholder" document. The confidential version of the complete reports will be provided to the Commission and Commission Staff, as well as the Energy Division, and will include a Confidentiality Declaration in compliance with D.16-08-024 that provides a general description of the information that is confidential, the location of the confidential information, and the basis for confidential treatment. See Appendix C to SCE's *Compliance Filing Pursuant to Load Impact Protocol Filing Requirements* for a copy of this Confidentiality Declaration.

2. *PY 2016 Load Impact Evaluation of Southern California Edison's Commercial Summer Discount Plan – Final Report;*

3. *PY 2016 Load Impact Evaluation of Southern California Edison's Agriculture and Pumping Interruptible Program – Final Report;*

4. *PY 2016 Load Impact Evaluation of Southern California Edison's Real-Time Pricing Program – Final Report; and*

5. *PY 2016 Load Impact Evaluation of Southern California Edison's Residential Save Power Day Program – Final Report.*

Additionally, SCE hereby provides notice that the final PY 2016 DR Load Impact Reports, with summary tables, for each of the following statewide DR programs have been posted on SCE's website:

1. *2016 Statewide Load Impact Evaluation of California Aggregator Demand Response Programs: Ex-Post and Ex-Ante Load Impacts – Final Report*;

2. *2016 Load Impact Evaluation of California's Statewide Base Interruptible Program– Final Report*;

3. *2016 California Statewide Non-residential Critical Peak Pricing Evaluation – Final Report*;

4. *2016 Load Impact Evaluation of the California Statewide Permanent Load Shifting Program – Final Report*; and

5. *2016 Load Impact Evaluation of California Statewide Demand Bidding Programs for Non-Residential Customers: Ex Post and Ex Ante Report – Final Report*.

Please use the following instructions to access the final reports listed above (both SCE-specific and Statewide reports) on SCE's website:

- Directly access the documents at http://www3.sce.com/law/cpucproceedings.nsf/vwSearchProceedings?SearchView&Query=R.13-09-011&SearchMax=1000&Key1=1&Key2=25

- then click the icon in the "Attachment" column that corresponds to the document you want to view.

  OR

- Go to ***www.sce.com/applications***;

- Under "CPUC Open Proceedings," type **R.13-09-011** into the search box;
- Click "GO;"
- From the Search Results screen, double-click the zip-file icon in the "Attachment" column that corresponds to the "SCE Final Load Impact Reports for Program Year 2016;"
- The documents are presented in Portable Document (.pdf) and Microsoft Excel (.xlsx) formats, and can be viewed online, printed, or saved to your own device.
- If you experience technical difficulties accessing the documents via the instructions outlined above, please contact Lisa Tobias, Paralegal, at (626) 302-3812 or Lisa.Tobias@sce.com.

These reports, with appendices, are voluminous and, therefore, physical copies of them can be provided on CD-ROM upon request to SCE Case Administration, who can be reached at (626) 302-3003 or case.admin@sce.com.

Respectfully submitted,

FADIA RAFEEDIE KHOURY
ROBIN Z. MEIDHOF

/s/ Robin Z. Meidhof
By: Robin Z. Meidhof

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April 3, 2017

Appendix C

Confidentiality Declaration

DECLARATION SUPPORTING
CONFIDENTIAL DESIGNATION
ON BEHALF OF
SOUTHERN CALIFORNIA EDISON COMPANY

1. I, Shahana Samiullah, am a/the Senior Manager of Southern California Edison Company ("SCE"), a California corporation. Marc Ulrich, Vice President of Customer Program & Services of SCE, delegated authority to me to sign this declaration. My business office is located at:

   Southern California Edison
   2244 Walnut Grove Avenue
   Rosemead, CA 91770

2. I am making this declaration in accordance with the instructions set forth in California Public Utilities Commission (CPUC or Commission) Decision (D.) 16-08-024, which governs the submission of certain types of confidential documents to the Commission.

3. SCE will produce the information identified in paragraph 4 of this Declaration to the CPUC or to departments within or contractors retained by the CPUC in response to a CPUC audit, data request, proceeding or other CPUC related requests.

4. Title and description of document(s):

   A. Southern California Edison's 2016 Portfolio Summary Report

   These documents contain the annual load impact evaluation analysis for SCE's portfolio of demand response programs for the 2016 program year. The report and accompanying tables include detailed analysis of hourly load for fewer than 15 customers.

   B. FINAL_Statewide 2016 PLS Evaluation Report - Private – SCE.doc
   FINAL_SCE 2016 PLS Ex Post Load Impact Tables – Private.xls
   FINAL_SCE 2016 PLS Ex Ante Load Impact Tables - Incremental – Private.xls
   FINAL_SCE 2016 PLS Ex Ante Load Impact Tables - Embedded – Private.xls

These documents contain the annual load impact evaluation analysis for the Permanent Load Shifting (PLS) program from the 2016 program year. The report and accompanying tables include detailed analysis of hourly load for fewer than 15 customers.

C. 2016 Statewide BIP Evaluation – FINAL PRIVATE CONFIDENTIAL.docx
2016 Statewide BIP Evaluation – FINAL PRIVATE CONFIDENTIAL.pdf
SCE 2016 BIP Ex Ante Load Impact Tables – PRIVATE CONFIDENTIAL.xlsx
SCE 2016 BIP Ex-Post Load Impact Tables – PRIVATE CONFIDENTIAL.xlsx

These documents contain the annual load impact evaluation analysis for the Base Interruptible Program (BIP) program from the 2016 program year. The report and accompanying tables include detailed analysis of hourly load for fewer than 15 customers.

D. Appendix C DBP SCE Ex Post Protocol Table Generator 2015 PRIVATE.xlsx
Appendix E SCE DBP Ex Ante Protocol Table Generator 2015 PRIVATE.xlsx
PY15 DBP Report SCE PRIVATE Final.docx

These documents contain the annual load impact evaluation analysis for the Demand Bidding Program (DBP) program from the 2016 program year. The report and accompanying tables include detailed analysis of hourly load for fewer than 15 customers.

E. Aggregator DR Programs_PY2016 Eval Report_SCE_Confidential_Final
Ex Ante Final_SCE_AMP (Confidential Version)
Ex Ante Final_SCE_CBP (Confidential Version)
Ex Post Final_SCE_CBP (Confidential Version)
Ex Post Final_SCE_AMP (Confidential Version)

These documents contain the annual load impact evaluation analysis for the Aggregator Managed Programs (AMP) program from the 2016 program year. The report and accompanying tables include detailed analysis of hourly load for fewer than 15 customers

F. SDP-C Ex Ante Tables (CAISO Peak Conditions) (CONFIDENTIAL).xlsx
SDP-C Ex Ante Tables (SCE Peak Conditions) (CONFIDENTIAL).xlsx
SDP-C Ex Post Tables (CONFIDENTIAL).xlsx
SDP-R Ex Post Tables (CONFIDENTIAL).xlsx

These documents contain the annual load impact evaluation analysis for the Summer Discount Plan (SDP) program from the 2016 program year. The report and accompanying tables include detailed analysis of hourly load for fewer than 15 customers.

G. 2016 Statewide CPP Evaluation - Final Report - Private (Confidential) for SCE.doc
SCE 2016 Non-Res CPP Ex-Post Impact Tables Combined - Private.xls
SCE 2016 Non-Res CPP Ex Ante Tables CAISO Weather - Private.xls
SCE 2016 Non-Res CPP Ex Ante Tables Utility Weather - Private.xls

These documents contain the annual load impact evaluation analysis for the Critical Peak Pricing (CPP) program from the 2016 program year. The report and accompanying table listed include detailed analysis of hourly load, which includes some customer segments containing fewer than 15 customers.

5. These documents contain confidential information that, based on my information and belief, have not been publicly disclosed. These documents have been marked as confidential, and the basis for confidential treatment and where the confidential information is located on the documents are identified on the following chart:

Check	Basis for Confidential Treatment	Where Confidential Information is located on the documents
X	Customer-specific data, which may include names, addresses, social security, (and other personally identifiable information) demand, demand reduction, loads, amounts of savings, and billing data. (Protected under Civ. Code §§1798 *et seq.*; Govt. Code §6254; Public Util. Code §8380; Decisions (D.) 14-05-016, 04-08-055, 06-12-029; and General Order (G.O.) 77-M)	There is confidential information throughout the files listed in item 4 above. The following items solely contain confidential data: FINAL_Statewide 2016 PLS Evaluation Report - Private – SCE.doc FINAL_SCE 2016 PLS Ex Post Load Impact Tables – Private.xls FINAL_SCE 2016 PLS Ex Ante Load Impact Tables - Incremental – Private.xls FINAL_SCE 2016 PLS Ex Ante Load Impact Tables - Embedded – Private.xls Appendix C DBP SCE Ex Post Protocol Table Generator 2015 PRIVATE.xlsx Appendix E SCE DBP Ex Ante Protocol Table Generator 2015 PRIVATE.xlsx PY15 DBP Report SCE PRIVATE Final.docx The following contain a combination of confidential and non-confidential data, with confidential information in each document clearly marked: Southern California Edison's 2016 Portfolio Summary Report 2016 Statewide BIP Evaluation – FINAL PRIVATE CONFIDENTIAL.docx 2016 Statewide BIP Evaluation – FINAL PRIVATE CONFIDENTIAL.pdf SCE 2016 BIP Ex Ante Load Impact Tables – PRIVATE CONFIDENTIAL.xlsx SCE 2016 BIP Ex-Post Load Impact Tables – PRIVATE CONFIDENTIAL.xlsx Aggregator DR Programs_PY2016 Eval Report_SCE_Confidential_Final Ex Ante Final_SCE_AMP (Confidential Version)

	Ex Ante Final_SCE_CBP (Confidential Version)
	Ex Post Final_SCE_CBP (Confidential Version)
	Ex Post Final_SCE_AMP (Confidential Version)
	SDP-C Ex Ante Tables (CAISO Peak Conditions) (CONFIDENTIAL).xlsx
	SDP-C Ex Ante Tables (SCE Peak Conditions) (CONFIDENTIAL).xlsx
	SDP-C Ex Post Tables (CONFIDENTIAL).xlsx
	SDP-R Ex Post Tables (CONFIDENTIAL).xlsx
	2016 Statewide CPP Evaluation - Final Report - Private (Confidential) for SCE.doc
	SCE 2016 Non-Res CPP Ex-Post Impact Tables Combined - Private.xls
	SCE 2016 Non-Res CPP Ex Ante Tables CAISO Weather - Private.xls
	SCE 2016 Non-Res CPP Ex Ante Tables Utility Weather - Private.xls

6. The importance of maintaining the confidentiality of this information outweighs any public interest in disclosure of this information. This information should be exempt from the public disclosure requirements under the Public Records Act and should be withheld from disclosure.
7. I declare under penalty of perjury that the foregoing is true, correct, and complete to the best of my knowledge.
8. Executed on this 3rd day of April 2017 at Rosemead, California.

/s/ Shahana Samiullah
Shahana Samiullah
Senior Manager
Southern California Edison Company