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

Order Instituting Rulemaking Regarding)
Policies and Protocols for Demand)
Response Load Impact Estimates, Cost-)
Effectiveness Methodologies, Megawatt) Rulemaking 07-01-041
Goals and Alignment with California)
Independent System Operator Market)
Design Protocols.)
_____)

**PACIFIC GAS AND ELECTRIC COMPANY (U 39 E) COMPLIANCE FILING
PURSUANT TO LOAD IMPACT PROTOCOL FILING REQUIREMENT ADOPTED IN
D.08-04-050, AS MODIFIED BY D.10-04-006, AND D.10-06-034, FOR SUMMARY OF
2012-2020 DEMAND RESPONSE PROGRAM EVALUATIONS**

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DATED: April 2, 2012

Attorney for
PACIFIC GAS AND ELECTRIC COMPANY

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D.08-04-050, AS MODIFIED BY D.10-04-006, AND D.10-06-034, FOR SUMMARY OF
2012-2020 DEMAND RESPONSE PROGRAM EVALUATIONS**

Pursuant to Commission Decision (D.) 08-04-050, as modified by D.10-04-006, Ordering Paragraph (OP)1, and D.10-06-034, OP 1.f, Pacific Gas and Electric Company (PG&E) submits its April 1, 2012 summary for its reliability-based program, Base Interruptible Program (BIP). The BIP summary report is being filed with the Commission Docket Office as attachment A to this pleading, and served via the attached notice of availability to fulfill the filing requirement for a BIP summary report contained in Ordering Paragraph 1.f. of D.10-06-034.

Pursuant to D.08-04-050 and D.10-04-060, the executive summary and accompanying appendices for PG&E's ex ante April 1, 2012 load impact reports for other programs normally would be filed with this pleading. However, on March 13, 2012, the Commission's Executive Director, Mr. Clanon, granted PG&E, Southern California Edison Company and San Diego Gas & Electric Company an extension of time to June 1, 2012 to file the annual load impact reports, because the utilities are awaiting the Commission's decision on 2012-2014 demand response (DR) programs so ex ante reports can reflect the results of that pending decision. The 2012-2014 DR decision currently is on the agenda for the Commission's April 19, 2012 meeting. Therefore, PG&E's annual ex ante executive summary for programs other than BIP will be filed no later

than June 1, 2012, instead of April 2, 2012. The complete ex ante reports also will be available on June 1, 2012.

PG&E's *ex post* reports for its demand response programs for program year 2011 are available now. They are voluminous and can be accessed at:

<http://apps.pge.com/regulation/search.aspx?CaseID=729>

The case is "Demand Response OIR"; the document type is "All"; the party is "All"; and the date fields are "4/2/2012". The titles of the PG&E reports, including the BIP summary, which can be accessed through the link, are:

1) 2011 Impact Evaluation of Pacific Gas & Electric's PeakChoice Program for Commercial and Industrial Customers – Ex Post Report

2) 2011 Ex Post Load Impact Evaluation of Pacific Gas and Electric Company's Residential Time-Based Pricing

3) 2011 Load Impact Evaluation for Pacific Gas and Electric Company's SmartAC Program—Ex Post Report

4) Pacific Gas and Electric 2012 Analysis of Reliability-Based Demand Response Capacity Eligible for Resource Adequacy Pursuant to D.10-06-034

A copy of the attached notice of availability for the BIP summary report and the ex post reports for the 2011 demand response programs will be served on the parties in this docket and A.11-03-001, et seq.

Respectfully submitted,

By: /s/ Shirley A. Woo
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DATED: April 2, 2011

Attorney for
PACIFIC GAS AND ELECTRIC COMPANY

ATTACHMENT A

**PACIFIC GAS AND ELECTRIC
2012 ANALYSIS OF RELIABILITY
BASED DEMAND RESPONSE CAPACITY
ELIGIBLE FOR RESOURCE ADEQUACY
PURSUANT TO D.10-06-034**

APRIL 2, 2012

In Phase 3 of R. 07-01-041, the CPUC sought to determine whether and how to limit the size of those DR programs of Pacific Gas and Electric (PG&E), Southern California Edison (SCE), and San Diego Gas & Electric (SDG&E) that can only be triggered if the CAISO declares an emergency.

On February 22, 2010, the IOUs and various other parties filed a proposed settlement, which would place an upper limit on the combined load impact capacity of those programs that the IOUs could use to meet their respective Resource Adequacy (RA) requirements, starting in 2012.¹ Starting in May 2010, that settlement would also remove the cap that CPUC Decision 09-08-027 had placed on the MW that each IOU could enroll in these types of programs in 2009 through 2011. The settlement applied to all IOU-triggered DR programs (referred to as “emergency-based” or “reliability-based” DR programs), in which customer load reductions are triggered only in response to abnormal and adverse operating conditions, such as imminent operating reserve deficiencies or violations of transmission constraints.

CPUC Decision 10-06-034 approved that settlement, and established the following requirement:²

In their annual April 1st Load Impact Compliance Protocol reports, PG&E, SCE, and SDG&E each shall include a summary of its reliability-based DR program (generally referred to as BIP, A/C Cycling, and AP-I) capacity and will compare the reliability-based capacity to its share of the overall limit (plus tolerance), consistent with Section C.2 of the Settlement.

The enrollment forecasts and ex ante load impact estimates PG&E filed on April 1, 2011 are based on that decision.

PG&E has only one program in this category, the Base Interruptible Program (BIP).³ The analysis presented here demonstrates that the ex ante load impacts of PG&E’s BIP will

¹ *Joint Motion of California Independent System Operator Corporation, California Large Energy Users Association, Division of Ratepayer Advocates, EnerNoc, Inc., Pacific Gas and Electric Company (U 39-E), San Diego Gas & Electric Company (U 902-E), Southern California Edison Company (U 338-E), and The Utility Reform Network for Adoption of Settlement: Settlement Attached*, filed on February 22, 2010 in Phase Three of CPUC R. 07-01-041.

² CPUC Decision 10-06-034, Ordering Paragraph (1.f).

³ The cap established by CPUC Decision 10-06-034 does not apply to programs that are triggered for reasons not exclusively limited to emergencies, which may include prices (or implied market heat rates), temperature, or system load, and “at utility discretion” programs triggered for such reasons, are not considered to be reliability-based programs even if they include an emergency-based (aka reliability-based) trigger. PG&E’s BIP and SmartAC programs were both emergency- or reliability-based programs at the time the CPUC adopted that decision. However, in Decision 11-01-036 the CPUC later approved PG&E’s request (in Advice Letter (A.) 09-08-018) to authorize the addition of a wholesale energy market “trigger” to the SmartAC program. As a result, SmartAC is no longer subject to the cap specified by CPUC Decision 10-06-034.

not exceed those which that decision allows PG&E to use in complying with its monthly Resource Adequacy requirements through 2021⁴.

Some of the customers enrolled in reliability programs are also concurrently enrolled in other DR programs. Therefore, CPUC Decision 10-06-034 established annual caps on:

- 1) each IOU's most recently filed ex ante estimates of the "program-specific" load impacts that would occur in the following year among the customers enrolled in that IOU's reliability DR programs if non-simultaneous events were called under each of those programs; MINUS,
- 2) each IOU's most recently filed ex ante estimates of the load impacts that would occur in the following year among the customers enrolled in those reliability DR programs that are also concurrently enrolled in other DR programs of that IOU, if non-simultaneous events were called under each of those other programs.

If the result does not exceed the cap for that following year, each IOU is allowed to utilize all of the portfolio-adjusted ex ante estimates of the load impacts of its reliability DR programs to comply with its Resource Adequacy requirements for that year.

The cap for the following year is determined as follows:

$$\text{CAP (MW)}_{t+1} = "X" \%_{t+1} \times (100\% + \text{Tolerance Band } \%_{t+1}) \times (\text{CAISO's Highest Recorded All-Time Coincident Peak Demand (MW)}_t)$$

where:

t = sub-script denoting the year in which load impact estimate is filed

X %= 3% for 2012, 2.5% for 2013, and 2.0% for 2014 and beyond

Tolerance Band % = 10% for 2012 through 2015, and 0% thereafter

If (1) minus (2) for all three IOUs for the following year exceeds that annual cap, the cap on the amount of reliability DR program load reduction capacity that each IOU will be

⁴ Due to the delay in filing updated ex ante load impacts pursuant to D.08-04-050, PG&E is making this filing using the 2011 ex ante load impact filing. However, PG&E expects there to be no change in the substantive outcome of this analysis (i.e. PG&E will remain under the cap), due to the fact that PG&E never exceeds 50% of the cap amount using 2011 ex ante values. Therefore, PG&E's 2012 ex ante BIP forecast would have to more than double for any given month in order to exceed the cap. PG&E has no reason to believe that this extreme outcome will be the case. If for some unforeseen PG&E's 2012 ex ante forecast were to result in a forecasted violation of the BIP cap, PG&E will amend this filing concurrently with its June 1st, 2012 ex ante load impact filing.

permitted to use to meet its Resource Adequacy requirement for that following year will not include be the amount by which (1) minus (2) for that IOU exceeds:

- 1) the cap; multiplied by
- 2) that IOU's percent share of the sum of the following amounts:
 - a. PG&E 400 MW
 - b. SCE 800 MW
 - c. SDG&E 20 MW

In other words, if (1) minus (2) for all three IOUs combined for the following year would exceed the annual cap for that year, the load reduction capacity of reliability DR programs that PG&E would be permitted to use to meet its Resource Adequacy (RA) requirement for the following year will be 32.8 percent ($0.328 = 400 / (400 + 800 + 20)$) of that annual cap.

In that case, the annual cap on the BIP demand response capacity impacts PG&E could use to comply with its monthly RA requirement for that next year would be applied to the ex ante estimates of the load impacts that would occur if BIP events were called under 1-in-2 weather conditions on the monthly PG&E system peak load day in the month in which the CAISO control area-wide peak load is expected to occur.

In the absence of forecasts of the month in which the CAISO control area-wide peak load is expected to occur in each year, in forecasting monthly enrollments in PG&E's BIP program PG&E conservatively assumed that the cap would apply to the ex ante estimates of the program-specific load impacts on each PG&E system monthly peak load day in the following year under 1-in-2 weather conditions. Furthermore, in calculating the cap, PG&E conservatively assumed that the CAISO's highest recorded all-time coincident peak demand as of February 2010 would not be exceeded during the period 2012 through 2021.

Those monthly calculations are reported in the annual tables that follow. Row 10 of each table demonstrates that the ex ante load impacts of PG&E's BIP program will not exceed PG&E's share of that monthly cap through at least 2021. Therefore, the cap is not expected to limit the BIP load reduction capacity PG&E will be able to use to meet its monthly Resource Adequacy requirements through 2021.

Table 1

Program Specific Load Impacts of BIP Program Under 1-in-2 Weather Conditions in the Entire PG&E Service Area, in 2012
 Compared to PG&E Share of CPUC Cap on Capacity of Reliability-Based DR Programs
 That Can Be Used to Meet PG&E's Resource Adequacy Requirements

Analysis Based on Program Specific Load Impacts (kW) Under 1-in-2 Weather Conditions [1]	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
(1) BIP Event Load Impacts Attributable to All Non-Residential Customers Enrolled in BIP	172,844	183,201	186,675	206,489	181,424	200,365	205,429	202,773	201,249	226,341	217,236	183,548
(2) DBP or Peak Choice Best Efforts DA Event Load Impacts Attributable Only to Customers Enrolled in Both BIP and DBP or Peak Choice Best Efforts DA [2]	131,837	137,957	139,203	151,196	130,914	142,346	144,289	140,814	138,089	153,884	147,839	123,971
(3) PDP Event Load Impacts Attributable Only to Customers Enrolled in Both PDP and BIP	0	0	0	0	0	0	0	0	0	0	0	0
(4) Total BIP Event Load Impacts MINUS PDP and DBP or Peak Choice Best Efforts DA Load Impacts Attributable to Customers Enrolled in BIP as Well as PDP or DBP or Peak Choice Best Efforts DA (= (1) - (2) - (3))	41,007	45,244	47,472	55,293	50,510	58,019	61,140	61,960	63,160	72,458	69,398	59,576
(5) CAISO Control Area All Time Annual Coincident Peak Demand As of February 2010 (kW)	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000
(6) 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	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.00%
(7) "Tolerance Band"	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%
(8) PG&E Share of Cap on BIP MW that Qualify for Resource Adequacy (=400 MW/(400 MW + 400 MW + 20 MW))	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%
(9) Cap on PG&E BIP Load Impacts That Qualify for Resource Adequacy (kW) (= (5) x (6) x (100% + (7)) x (8))	634,556	634,556	634,556	634,556	634,556	634,556	634,556	634,556	634,556	634,556	634,556	543,905
(10) Amount by Which Total BIP Event Load Impacts MINUS PDP and DBP or Peak Choice Best Efforts DA Load Impacts Attributable to Customers Enrolled in BIP As Well as PDP or DBP or Peak Choice Best Efforts DA Exceeds Cap (= (4) - (9))	0	0	0	0	0	0	0	0	0	0	0	0

FOOTNOTES

[1] Analysis based on Average of Program Specific hourly ex ante load impacts (kW) under 1-in-2 weather conditions from 1 to 6 PM on monthly system peak load days in April through October, and from 4 PM through 9 PM on monthly system peak load days in November through March.

[2] DBP customers are forecasted to move to PeakChoice, Best Efforts, Day Ahead in January 2013.

Table 2
Program Specific Load Impacts of BIP Program Under 1-in-2 Weather Conditions in the Entire PG&E Service Area, in 2013
Compared to PG&E Share of CPUC Cap on Capacity of Reliability-Based DR Programs
That Can Be Used to Meet PG&E's Resource Adequacy Requirements

Analysis Based on Program Specific Load Impacts (kW) Under 1-in-2 Weather Conditions [1]		Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13
(1)	BIP Event Load Impacts Attributable to All Non-Residential Customers Enrolled in BIP	189,954	200,405	203,258	223,952	196,261	216,057	220,899	217,582	215,496	242,065	231,863	195,857
(2)	DBP or Peak Choice Best Efforts DA Event Load Impacts Attributable Only to Customers Enrolled in Both BIP and DBP or Peak Choice Best Efforts DA [2]	127,110	132,982	134,130	145,698	126,217	137,180	139,036	135,675	133,059	148,250	142,408	119,500
(3)	PDP Event Load Impacts Attributable Only to Customers Enrolled in Both PDP and BIP	0	0	0	0	0	0	0	0	0	0	0	0
(4)	Total BIP Event Load Impacts MINUS PDP and DBP or Peak Choice Best Efforts DA Load Impacts Attributable to Customers Enrolled in BIP as Well as PDP or DBP or Peak Choice Best Efforts DA (= (1) - (2) - (3))	62,843	67,423	69,127	78,254	70,044	78,877	81,863	81,908	82,437	93,815	89,456	76,357
(5)	CAISO Control Area All Time Annual Coincident Peak Demand As of February 2010 (kW)	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000
(6)	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	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	2.50%
(7)	"Tolerance Band"	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%
(8)	PG&E Share of Cap on BIP MW that Qualify for Resource Adequacy (=400 MW/(400 MW + 400 MW + 20 MW))	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%
(9)	Cap on PG&E BIP Load Impacts That Qualify for Resource Adequacy (kW) (= (5) x (6) x (100% + (7)) x (8))	543,905	543,905	543,905	543,905	543,905	543,905	543,905	543,905	543,905	543,905	543,905	453,254
(10)	Amount by Which Total BIP Event Load Impacts MINUS PDP and DBP or Peak Choice Best Efforts DA Load Impacts Attributable to Customers Enrolled in BIP As Well as PDP or DBP or PeakChoice Best Efforts DA Exceeds Cap (= (4) - (9))	0	0	0	0	0	0	0	0	0	0	0	0

FOOTNOTES

[1] Analysis based on Average of Program Specific hourly ex ante load impacts (kW) under 1-in-2 weather conditions from 1 to 6 PM on monthly system peak load days in April through October, and from 4 PM through 9 PM on monthly system peak load days in November through March.

[2] DBP customers are forecasted to move to PeakChoice, Best Efforts, Day Ahead in January 2013.

Table 3
Program Specific Load Impacts of BIP Program Under 1-in-2 Weather Conditions in the Entire PG&E Service Area, in 2014
 Compared to PG&E Share of CPUC Cap on Capacity of Reliability-Based DR Programs
 That Can Be Used to Meet PG&E's Resource Adequacy Requirements

Analysis Based on Program Specific Load Impacts (kW) Under 1-in-2 Weather Conditions [1]		Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14
(1)	BIP Event Load Impacts Attributable to All Non-Residential Customers Enrolled in BIP	202,475	213,433	216,244	238,068	208,657	229,426	234,305	230,582	228,072	255,916	244,657	206,566
(2)	DBP or Peak Choice Best Efforts DA Event Load Impacts Attributable Only to Customers Enrolled in Both BIP and DBP or Peak Choice Best Efforts DA [2]	122,529	128,176	129,263	140,425	121,689	132,201	133,978	130,737	128,212	142,842	137,171	115,181
(3)	PDP Event Load Impacts Attributable Only to Customers Enrolled in Both PDP and BIP	0	0	0	0	0	0	0	0	0	0	0	0
(4)	Total BIP Event Load Impacts MINUS PDP and DBP or Peak Choice Best Efforts DA Load Impacts Attributable to Customers Enrolled in BIP as Well as PDP or DBP or Peak Choice Best Efforts DA (= (1) - (2) - (3))	79,946	85,258	86,981	97,642	86,967	97,225	100,327	99,845	99,860	113,074	107,486	91,385
(5)	CAISO Control Area All Time Annual Coincident Peak Demand As of February 2010 (kW)	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000
(6)	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	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.00%
(7)	"Tolerance Band"	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%
(8)	PG&E Share of Cap on BIP MW that Qualify for Resource Adequacy (=400 MW/(400 MW + 400 MW + 20 MW)	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%
(9)	Cap on PG&E BIP Load Impacts That Qualify for Resource Adequacy (kW) (= (5) x (6) x (100% + (7)) x (8))	453,254	362,603										
(10)	Amount by Which Total BIP Event Load Impacts MINUS PDP and DBP or Peak Choice Best Efforts DA Load Impacts Attributable to Customers Enrolled in BIP As Well as PDP or DBP or PeakChoice Best Efforts DA Exceeds Cap (= (4) - (9))	0	0	0	0	0	0	0	0	0	0	0	0

FOOTNOTES

[1] Analysis based on Average of Program Specific hourly ex ante load impacts (kW) under 1-in-2 weather conditions from 1 to 6 PM on monthly system peak load days in April through October, and from 4 PM through 9 PM on monthly system peak load days in November through March.

[2] DBP customers are forecasted to move to PeakChoice, Best Efforts, Day Ahead in January 2013.

Table 4
 Program Specific Load Impacts of BIP Program Under 1-in-2 Weather Conditions in the Entire PG&E Service Area, in 2015
 Compared to PG&E Share of CPUC Cap on Capacity of Reliability-Based DR Programs
 That Can Be Used to Meet PG&E's Resource Adequacy Requirements

Analysis Based on Program Specific Load Impacts (kW) Under 1-in-2 Weather Conditions [1]	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15
(1) BIP Event Load Impacts Attributable to All Non-Residential Customers Enrolled in BIP	212,854	223,673	225,850	247,876	216,779	237,566	241,857	237,334	234,003	261,828	249,460	210,086
(2) DBP or Peak Choice Best Efforts DA Event Load Impacts Attributable Only to Customers Enrolled in Both BIP and DBP or Peak Choice Best Efforts DA [2]	117,883	123,067	123,827	134,256	116,146	125,887	127,310	123,985	121,351	134,928	129,320	108,394
(3) PDP Event Load Impacts Attributable Only to Customers Enrolled in Both PDP and BIP	0	0	0	0	0	0	0	0	0	0	0	0
(4) Total BIP Event Load Impacts MINUS PDP and DBP or Peak Choice Best Efforts DA Load Impacts Attributable to Customers Enrolled in BIP as Well as PDP or DBP or Peak Choice Best Efforts DA (= (1) - (2) - (3))	94,970	100,606	102,023	113,620	100,633	111,679	114,548	113,350	112,651	126,900	120,139	101,692
(5) CAISO Control Area All Time Annual Coincident Peak Demand As of February 2010 (kW)	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000
(6) 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%
(7) "Tolerance Band"	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%
(8) PG&E Share of Cap on BIP MW that Qualify for Resource Adequacy (=400 MW/(400 MW + 400 MW + 20 MW)	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%
(9) Cap on PG&E BIP Load Impacts That Qualify for Resource Adequacy (kW) (=5) x (6) x (100%+(7)) x (8)	362,603	362,603	362,603	362,603	362,603	362,603	362,603	362,603	362,603	362,603	362,603	362,603
(10) Amount by Which Total BIP Event Load Impacts MINUS PDP and DBP or Peak Choice Best Efforts DA Load Impacts Attributable to Customers Enrolled in BIP As Well as PDP or DBP or PeakChoice Best Efforts DA Exceeds Cap (= (4) - (9))	0	0	0	0	0	0	0	0	0	0	0	0

FOOTNOTES

[1] Analysis based on Average of Program Specific hourly ex ante load impacts (kW) under 1-in-2 weather conditions from 1 to 6 PM on monthly system peak load days in April through October, and from 4 PM through 9 PM on monthly system peak load days in November through March.

[2] DBP customers are forecasted to move to PeakChoice, Best Efforts, Day Ahead in January 2013.

Table 5
Program Specific Load Impacts of BIP Program Under 1-in-2 Weather Conditions in the Entire PG&E Service Area, in 2016
Compared to PG&E Share of CPUC Cap on Capacity of Reliability-Based DR Programs
That Can Be Used to Meet PG&E's Resource Adequacy Requirements

Analysis Based on Program Specific Load Impacts (kW) Under 1-in-2 Weather Conditions [1]		Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16
(1)	BIP Event Load Impacts Attributable to All Non-Residential Customers Enrolled in BIP	216,282	227,094	229,102	251,214	219,680	240,507	244,644	239,925	236,339	264,276	251,521	211,775
(2)	DBP or Peak Choice Best Efforts DA Event Load Impacts Attributable Only to Customers Enrolled in Both BIP and DBP or Peak Choice Best Efforts DA [2]	110,945	115,818	116,528	126,341	109,314	118,452	119,790	116,655	114,182	126,970	121,687	102,011
(3)	PDP Event Load Impacts Attributable Only to Customers Enrolled in Both PDP and BIP	0	0	0	0	0	0	0	0	0	0	0	0
(4)	Total BIP Event Load Impacts MINUS PDP and DBP or Peak Choice Best Efforts DA Load Impacts Attributable to Customers Enrolled in BIP as Well as PDP or DBP or Peak Choice Best Efforts DA (= (1) - (2) - (3))	105,337	111,276	112,574	124,873	110,366	122,055	124,854	123,271	122,157	137,307	129,833	109,765
(5)	CAISO Control Area All Time Annual Coincident Peak Demand As of February 2010 (kW)	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000
(6)	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%
(7)	"Tolerance Band"	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%
(8)	PG&E Share of Cap on BIP MW that Qualify for Resource Adequacy (=400 MW/(400 MW + 400 MW + 20 MW))	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%
(9)	Cap on PG&E BIP Load Impacts That Qualify for Resource Adequacy (kW) (= (5) x (6) x (100% + (7)) x (8))	362,603	362,603	362,603	362,603	362,603	362,603	362,603	362,603	362,603	362,603	362,603	362,603
(10)	Amount by Which Total BIP Event Load Impacts MINUS PDP and DBP or Peak Choice Best Efforts DA Load Impacts Attributable to Customers Enrolled in BIP As Well as PDP or DBP or Peak Choice Best Efforts DA Exceeds Cap (= (4) - (9))	0	0	0	0	0	0	0	0	0	0	0	0

FOOTNOTES

[1] Analysis based on Average of Program Specific hourly ex ante load impacts (kW) under 1-in-2 weather conditions from 1 to 6 PM on monthly system peak load days in April through October, and from 4 PM through 9 PM on monthly system peak load days in November through March.

[2] DBP customers are forecasted to move to PeakChoice, Best Efforts, Day Ahead in January 2013.

Table 6
Program Specific Load Impacts of BIP Program Under 1-in-2 Weather Conditions in the Entire PG&E Service Area, in 2017
 Compared to PG&E Share of CPUC Cap on Capacity of Reliability-Based DR Programs
 That Can Be Used to Meet PG&E's Resource Adequacy Requirements

Analysis Based on Program Specific Load Impacts (kW) Under 1-in-2 Weather Conditions [1]		Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
(1)	BIP Event Load Impacts Attributable to All Non-Residential Customers Enrolled in BIP	217,877	228,627	230,485	252,540	220,868	241,595	245,580	240,747	236,973	264,845	251,847	212,057
(2)	DBP or Peak Choice Best Efforts DA Event Load Impacts Attributable Only to Customers Enrolled in Both BIP and DBP or Peak Choice Best Efforts DA [2]	104,410	108,997	109,670	118,897	102,883	111,460	112,721	109,761	107,429	119,478	114,513	96,019
(3)	PDP Event Load Impacts Attributable Only to Customers Enrolled in Both PDP and BIP	0	0	0	0	0	0	0	0	0	0	0	0
(4)	Total BIP Event Load Impacts MINUS PDP and DBP or Peak Choice Best Efforts DA Load Impacts Attributable to Customers Enrolled in BIP as Well as PDP or DBP or Peak Choice Best Efforts DA (= (1) - (2) - (3))	113,467	119,630	120,815	133,643	117,985	130,135	132,860	130,986	129,544	145,367	137,334	116,038
(5)	CAISO Control Area All Time Annual Coincident Peak Demand As of February 2010 (kW)	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000
(6)	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%
(7)	"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%
(8)	PG&E Share of Cap on BIP MW that Qualify for Resource Adequacy (=400 MW/(400 MW + 400 MW + 20 MW))	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%
(9)	Cap on PG&E BIP Load Impacts That Qualify for Resource Adequacy (kW) (= (5) x (6) x (100% + (7)) x (8))	329,639	329,639	329,639	329,639	329,639	329,639	329,639	329,639	329,639	329,639	329,639	329,639
(10)	Amount by Which Total BIP Event Load Impacts MINUS PDP and DBP or Peak Choice Best Efforts DA Load Impacts Attributable to Customers Enrolled in BIP As Well as PDP or DBP or Peak Choice Best Efforts DA Exceeds Cap (= (4) - (9))	0	0	0	0	0	0	0	0	0	0	0	0

FOOTNOTES

[1] Analysis based on Average of Program Specific hourly ex ante load impacts (kW) under 1-in-2 weather conditions from 1 to 6 PM on monthly system peak load days in April through October, and from 4 PM through 9 PM on monthly system peak load days in November through March.

[2] DBP customers are forecasted to move to PeakChoice, Best Efforts, Day Ahead in January 2013.

Table 7
Program Specific Load Impacts of BIP Program Under 1-in-2 Weather Conditions in the Entire PG&E Service Area, in 2018
 Compared to PG&E Share of CPUC Cap on Capacity of Reliability-Based DR Programs
 That Can Be Used to Meet PG&E's Resource Adequacy Requirements

Analysis Based on Program Specific Load Impacts (kW) Under 1-in-2 Weather Conditions [1]		Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18
(1)	BIP Event Load Impacts Attributable to All Non-Residential Customers Enrolled in BIP	218,063	228,716	230,435	252,325	220,742	241,263	245,102	240,215	236,306	263,978	250,852	211,266
(2)	DBP or Peak Choice Best Efforts DA Event Load Impacts Attributable Only to Customers Enrolled in Both BIP and DBP or Peak Choice Best Efforts DA [2]	98,268	102,590	103,216	111,899	96,829	104,889	106,068	103,288	101,091	112,435	107,769	90,373
(3)	PDP Event Load Impacts Attributable Only to Customers Enrolled in Both PDP and BIP	0	0	0	0	0	0	0	0	0	0	0	0
(4)	Total BIP Event Load Impacts MINUS PDP and DBP or Peak Choice Best Efforts DA Load Impacts Attributable to Customers Enrolled in BIP as Well as PDP or DBP or Peak Choice Best Efforts DA (= (1) - (2) - (3))	119,795	126,126	127,219	140,426	123,913	136,374	139,034	136,927	135,215	151,543	143,083	120,894
(5)	CAISO Control Area All Time Annual Coincident Peak Demand As of February 2010 (kW)	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000
(6)	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%
(7)	"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%
(8)	PG&E Share of Cap on BIP MW that Qualify for Resource Adequacy (=400 MW/(400 MW + 400 MW + 20 MW)	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%
(9)	Cap on PG&E BIP Load Impacts That Qualify for Resource Adequacy (kW) (= (5) x (6) x (100% + (7)) x (8))	329,639											
(10)	Amount by Which Total BIP Event Load Impacts MINUS PDP and DBP or Peak Choice Best Efforts DA Load Impacts Attributable to Customers Enrolled in BIP As Well as PDP or DBP or PeakChoice Best Efforts DA Exceeds Cap (= (4) - (9))	0	0	0	0	0	0	0	0	0	0	0	0

FOOTNOTES

[1] Analysis based on Average of Program Specific hourly ex ante load impacts (kW) under 1-in-2 weather conditions from 1 to 6 PM on monthly system peak load days in April through October, and from 4 PM through 9 PM on monthly system peak load days in November through March.

[2] DBP customers are forecasted to move to PeakChoice, Best Efforts, Day Ahead in January 2013.

Table 8
Program Specific Load Impacts of BIP Program Under 1-in-2 Weather Conditions in the Entire PG&E Service Area, in 2019
 Compared to PG&E Share of CPUC Cap on Capacity of Reliability-Based DR Programs
 That Can Be Used to Meet PG&E's Resource Adequacy Requirements

Analysis Based on Program Specific Load Impacts (kW) Under 1-in-2 Weather Conditions [1]		Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19
(1)	BIP Event Load Impacts Attributable to All Non-Residential Customers Enrolled in BIP	217,180	227,708	229,295	250,942	219,618	239,855	243,552	238,660	234,656	262,028	248,862	209,667
(2)	DBP or Peak Choice Best Efforts DA Event Load Impacts Attributable Only to Customers Enrolled in Both BIP and DBP or Peak Choice Best Efforts DA [2]	92,498	96,568	97,154	105,312	91,146	98,710	99,824	97,190	95,132	105,822	101,430	85,070
(3)	PDP Event Load Impacts Attributable Only to Customers Enrolled in Both PDP and BIP	0	0	0	0	0	0	0	0	0	0	0	0
(4)	Total BIP Event Load Impacts MINUS PDP and DBP or Peak Choice Best Efforts DA Load Impacts Attributable to Customers Enrolled in BIP as Well as PDP or DBP or Peak Choice Best Efforts DA (= (1) - (2) - (3))	124,682	131,140	132,141	145,629	128,472	141,144	143,728	141,470	139,525	156,206	147,432	124,597
(5)	CAISO Control Area All Time Annual Coincident Peak Demand As of February 2010 (kW)	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000
(6)	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%
(7)	"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%
(8)	PG&E Share of Cap on BIP MW that Qualify for Resource Adequacy (=400 MW/(400 MW + 400 MW + 20 MW))	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%
(9)	Cap on PG&E BIP Load Impacts That Qualify for Resource Adequacy (kW) (=5) x (6) x (100% + (7)) x (8)	329,639											
(10)	Amount by Which Total BIP Event Load Impacts MINUS PDP and DBP or Peak Choice Best Efforts DA Load Impacts Attributable to Customers Enrolled in BIP As Well as PDP or DBP or Peak Choice Best Efforts DA Exceeds Cap (= (4) - (9))	0	0	0	0	0	0	0	0	0	0	0	0

FOOTNOTES

[1] Analysis based on Average of Program Specific hourly ex ante load impacts (kW) under 1-in-2 weather conditions from 1 to 6 PM on monthly system peak load days in April through October, and from 4 PM through 9 PM on monthly system peak load days in November through March.

[2] DBP customers are forecasted to move to PeakChoice, Best Efforts, Day Ahead in January 2013.

Table 9
Program Specific Load Impacts of BIP Program Under 1-in-2 Weather Conditions in the Entire PG&E Service Area, in 2020
 Compared to PG&E Share of CPUC Cap on Capacity of Reliability-Based DR Programs
 That Can Be Used to Meet PG&E's Resource Adequacy Requirements

Analysis Based on Program Specific Load Impacts (kW) Under 1-in-2 Weather Conditions [1]		Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20
(1)	BIP Event Load Impacts Attributable to All Non-Residential Customers Enrolled in BIP	215,494	225,873	227,339	248,684	217,744	237,641	241,202	236,343	232,276	259,272	246,135	207,468
(2)	DBP or Peak Choice Best Efforts DA Event Load Impacts Attributable Only to Customers Enrolled in Both BIP and DBP or Peak Choice Best Efforts DA [2]	87,072	90,910	91,455	99,130	85,795	92,908	93,951	91,470	89,524	99,606	95,466	80,081
(3)	PDP Event Load Impacts Attributable Only to Customers Enrolled in Both PDP and BIP	0	0	0	0	0	0	0	0	0	0	0	0
(4)	Total BIP Event Load Impacts MINUS PDP and DBP or Peak Choice Best Efforts DA Load Impacts Attributable to Customers Enrolled in BIP as Well as PDP or DBP or Peak Choice Best Efforts DA (= (1) - (2) - (3))	128,422	134,963	135,884	149,554	131,949	144,733	147,251	144,872	142,752	159,666	150,669	127,387
(5)	CAISO Control Area All Time Annual Coincident Peak Demand As of February 2010 (kW)	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000
(6)	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%
(7)	"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%
(8)	PG&E Share of Cap on BIP MW that Qualify for Resource Adequacy (=400 MW/(400 MW + 400 MW + 20 MW))	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%
(9)	Cap on PG&E BIP Load Impacts That Qualify for Resource Adequacy (kW) (= (5) x (6) x (100% + (7)) x (8))	329,639											
(10)	Amount by Which Total BIP Event Load Impacts MINUS PDP and DBP or Peak Choice Best Efforts DA Load Impacts Attributable to Customers Enrolled in BIP As Well as PDP or DBP or Peak Choice Best Efforts DA Exceeds Cap (= (4) - (9))	0	0	0	0	0	0	0	0	0	0	0	0

FOOTNOTES

[1] Analysis based on Average of Program Specific hourly ex ante load impacts (kW) under 1-in-2 weather conditions from 1 to 6 PM on monthly system peak load days in April through October, and from 4 PM through 9 PM on monthly system peak load days in November through March.

[2] DBP customers are forecasted to move to PeakChoice, Best Efforts, Day Ahead in January 2013.

Table 10
Program Specific Load Impacts of BIP Program Under 1-in-2 Weather Conditions in the Entire PG&E Service Area, in 2021
Compared to PG&E Share of CPUC Cap on Capacity of Reliability-Based DR Programs
That Can Be Used to Meet PG&E's Resource Adequacy Requirements

Analysis Based on Program Specific Load Impacts (kW) Under 1-in-2 Weather Conditions [1]	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21
(1) BIP Event Load Impacts Attributable to All Non-Residential Customers Enrolled in BIP	213,212	223,425	224,780	245,780	215,319	234,836	238,266	233,467	229,362	255,930	242,874	204,833
(2) DBP or Peak Choice Best Efforts DA Event Load Impacts Attributable Only to Customers Enrolled in Both BIP and DBP or Peak Choice Best Efforts DA [2]	81,981	85,580	86,092	93,318	80,773	87,446	88,423	86,081	84,255	93,758	89,859	75,390
(3) PDP Event Load Impacts Attributable Only to Customers Enrolled in Both PDP and BIP	0	0	0	0	0	0	0	0	0	0	0	0
(4) Total BIP Event Load Impacts MINUS PDP and DBP or Peak Choice Best Efforts DA Load Impacts Attributable to Customers Enrolled in BIP as Well as PDP or DBP or Peak Choice Best Efforts DA (= (1) - (2) - (3))	131,231	137,845	138,688	152,462	134,545	147,390	149,844	147,386	145,107	162,172	153,015	129,444
(5) CAISO Control Area All Time Annual Coincident Peak Demand As of February 2010 (kW)	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000	50,270,000
(6) 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%
(7) "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%
(8) PG&E Share of Cap on BIP MW that Qualify for Resource Adequacy (=400 MW/(400 MW + 400 MW + 20 MW)	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%	32.79%
(9) Cap on PG&E BIP Load Impacts That Qualify for Resource Adequacy (kW) (=5) x (6) x (100% + (7)) x (8))	329,639	329,639	329,639	329,639	329,639	329,639	329,639	329,639	329,639	329,639	329,639	329,639
(10) Amount by Which Total BIP Event Load Impacts MINUS PDP and DBP or Peak Choice Best Efforts DA Load Impacts Attributable to Customers Enrolled in BIP As Well as PDP or DBP or PeakChoice Best Efforts DA Exceeds Cap (= (4) - (9))	0	0	0	0	0	0	0	0	0	0	0	0

FOOTNOTES

[1] Analysis based on Average of Program Specific hourly ex ante load impacts (kW) under 1-in-2 weather conditions from 1 to 6 PM on monthly system peak load days in April through October, and from 4 PM through 9 PM on monthly system peak load days in November through March.

[2] DBP customers are forecasted to move to PeakChoice, Best Efforts, Day Ahead in January 2013.