California Independent
System Operator Corporation

April 16, 2013

The Honorable Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, D.C. 20426

Re: California Independent System Operator Corporation
Docket No. ER06-615-___
Second Corrected Annual Demand Response Report

Dear Secretary Bose:

The California Independent System Operator Corporation ("ISO") hereby submits two versions of a report, entitled *"Second Corrected Sixth Annual Report of the California Independent System Operator Evaluating Demand Response Participation in the California ISO in Calendar Year 2012"* (hereinafter, "Second Corrected Sixth Annual Report"). The two versions are:

- A Confidential Version (marked as such) containing confidential information; and
- A Public Version (marked as such) in which the confidential information has been redacted.

On January 15, 2013, the ISO submitted its public and confidential versions of its Sixth Annual Report. On April 12, 2013, the ISO submitted a corrected version of the report to address comments filed by the California Department of Water Resources State Water Project ("SWP") and to revise certain data. Shortly after filing the corrected report, the ISO realized that the template used for the January 15, 2012 report contained several references to 2011 that should have been updated to reflect calendar year 2012. The template also contained some minor formatting inconsistencies that the ISO corrected. Accordingly, the ISO is filing a Second Corrected Sixth Annual Report. The ISO apologizes for any inconvenience this may have caused.

The ISO requests confidential treatment of the Second Corrected Sixth Annual Report, which is included as Attachment A to this filing, pursuant to Section 388.112 of the Commission's regulations.[1] Confidential treatment of this Corrected Sixth Annual Report is appropriate because the report contains commercially sensitive data regarding the participation of one entity in the ISO's market.

[1] 18 C.F.R. § 388.112.

COMMUNICATIONS

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CONTENTS OF FILING

The following documents are included in this filing:

(1) This transmittal letter;

(2) Attachment A – *Second Corrected Sixth Annual Report of the California Independent System Operator Evaluating Demand Response Participation in the California ISO in Calendar Year 2012*

Respectfully submitted,

By: */s/ Sidney M. Davies*

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ATTACHMENT A

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SECOND CORRECTED 2012 ANNUAL REPORT OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR EVALUATING DEMAND RESPONSE PARTICIPATION IN THE CALIFORNIA ISO

Reporting Period: Calendar Year 2012

Date: April 16, 2013

INTRODUCTION

Obligation to Submit an Annual Report

The California Independent System Operator Corporation ("ISO") submits this Second Corrected 2012 ANNUAL REPORT OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR EVALUATING DEMAND RESPONSE PARTICIPATION IN THE ISO; (hereinafter, "2012 Annual Report").[1]

The reporting requirement emanates from the Commission's June 25, 2007 Order on Compliance in the proceeding commonly known as the "MRTU Docket," which provided that:

> Finally, we direct the CAISO to file annual reports evaluating its demand response programs, including the amount of demand response it has elicited. The CAISO should file the first report January 15, 2008. At a minimum, the CAISO's report must include: (a) information on customer enrollment for each demand response program in terms of the number of customers and total potential in load reduction in MWs; and (b) information on total load reductions achieved per program per event during the prior year, including the CAISO's system load at time of curtailments, total MWs reduced, total payments for reductions and effects of the demand response programs on wholesale prices.[*FN See, e.g., ISO New England, Inc., 102 FERC ¶ 61,202 (2003)*] [2]

The CPUC is Continuing to Address the Rules for Retail Customers to Directly Bid Demand Response into the California ISO Market

The ISO launched its proxy demand resource product on August 10, 2010, and intends to implement its reliability demand response resource product in the spring of 2012, provided FERC tariff approval. Last year, the California Public Utilities Commission (CPUC) issued a decision directing investor owned utilities to prepare to bid demand response into the ISO markets using proxy demand resource pilot programs.[3] While a positive first step, the CPUC decision expressly limited the participation by bundled utility customers to participate other than through an Investor Owned Utility ("IOU") pilot program in response to FERC Order 719-A.[4] The CPUC decision did, however, appear to allow for direct access customers, those that procure their electricity through a third-party electricity provider, to offer demand response in the ISO market. The decision also identified several important issues that the CPUC stated had to be resolved and clarified before it would allow all customers to offer demand response into the ISO market. Those issues include resolution of demand response compensation under

[1] The ISO is sometimes referred to as the CAISO.
[2] *California Independent System Operator Corp*. 119 FERC ¶ 61,313 (2007) "June 25, 2007 Order on Compliance Filings" (hereinafter "June 25, 2007 Order") at P. 226.
[3] CPUC Decision 10-06-002, issued in Proceeding R.07-01-041. The decision can be accessed on the CPUC's website at: http://docs.cpuc.ca.gov/PUBLISHED/FINAL_DECISION/118962.htm.
[4] *Wholesale Competition in Regions with Organized Electric Markets*, Order No. 719-A, FERC Stats. & Regs. ¶ 31,292 (2009).

FERC Order 745, resolving information needs between parties involved in a demand response transaction, and CPUC jurisdiction and oversight over third-party (i.e. non-IOU) demand response providers.

Apart from compensation concerns being addressed at the wholesale level, the CPUC has taken steps to develop a retail tariff rule, Rule 24, which will guide the terms, conditions and obligations of retail parties to a wholesale demand response transaction. This activity have been moving forward slowly with a draft Rule 24 proposed and parties providing sets of comments on the rule.

Until the CPUC proceeding resolves these outstanding issues, the CPUC's prohibition on utility bundled customers offering demand response other than through IOU pilot programs will likely remain in effect. While market participants have expressed interest to the ISO in the proxy demand resource product, to date, there has only been limited participation. The ISO believes that the relatively slow pace of demand response participation in the ISO market is because of 1) state and federal regulatory uncertainty around demand response compensation and, 2) the lack of a clear CPUC policy on resource adequacy capacity payments for third-party delivered demand resources offered directly into the wholesale market.

To Date, the Situation in California Remains that There is No Avenue for Non-IOU Demand Response Providers to Access Resource Capacity Revenue Streams Under the CPUC's Resource Adequacy Program

Robust participation of demand response in the wholesale market is limited because of the inability for third-party demand response providers to access resource adequacy ("RA") capacity payments. Currently, the CPUC has not established rules that allow third-party demand response resources to qualify as supply-comparable resource adequacy resources. Instead, resource adequacy treatment is only given to demand response that is enrolled in a utility retail demand response program or procured by an IOU. Demand response enrolled in a utility program comes "off the top" of a load serving entity's resource adequacy requirement (by reducing the level of demand for which the IOU must procure RA resources). Without direct access to resource adequacy capacity payments, the ISO believes it will be very difficult for a competitive demand response delivery paradigm to develop in California. The ISO continues to petition the CPUC to eliminate this barrier and pursue a path for the competitive procurement of all demand response.

EXECUTIVE SUMMARY AND REQUEST FOR CONFIDENTIAL TREATMENT

Types of Demand Response Participation in the ISO

Participating Load: The Participating Load product is a dispatchable demand resource offered to the ISO through a demand response provider who also acts as the load serving entity for the underlying load. The Participating Load Agreement establishes the

relationship between the demand response provider and the ISO and provides that the relationship is governed by the ISO Tariff.

Proxy Demand Resource: The ISO initiated its proxy demand resource product on August 2010.[5] The proxy demand resource product was developed with extensive stakeholder input in response to the FERC Order 719, which required that the ISO amend its market rules to permit an Aggregator of Retail Customers (aka demand response provider) to bid demand response on behalf of retail customers directly into the ISO organized market.[6] The Proxy Demand Resource Agreement establishes the relationship between the demand response provider and the ISO and provides that the relationship is governed by the ISO Tariff.

Demand Response Participation

As of the date of this report, the ISO has four total demand response participants. The ISO Participating Load product has one active participant; the California Department of Water Resources State Water Project ("CDWR-SWP"). This participant schedules, bids, and settles under six (6) unique Participating Load resource IDs, which can represent multiple underlying aggregated pump loads.

The proxy demand resource product has had three participants; Pacific Gas and Electric ("PG&E"), Southern California Edison ("SCE") and San Diego Gas & Electric ("SDG&E"). These participants bid under nine unique proxy demand resource IDs, which represent multiple underlying aggregated retail service accounts.

- **Scope of this Report** This report follows the ISO's previous annual reports of not including data for Pumped Hydro Storage Facilities. As the ISO originally explained in its First Annual Report, the reason for this approach is that these facilities operate differently than traditional demand response resources, in that pumped hydro storage facilities affirmatively schedule and increase load as well as provide load curtailment. The ISO believes that this report's focus on traditional demand response resources results in more meaningful content, because the reported information can be more meaningfully compared against other regions and organized markets, which was a primary purpose for imposing the reporting obligation.

Contribution of Demand Response to Non Spinning Reserves Needs for 2012

On average, over the January 1st to November 30th period covered in this report, the ISO system needed approximately 867 MW of Non-spinning Reserve capacity per

[5] *Order Conditionally Accepting Tariff Changes and Directing Compliance Filing*, 132 FERC ¶ 61,045 (issued July 15, 2010), accessible on the ISO's website at http://www.caiso.com/27d9/27d9cbb6770.pdf.
[6] *Wholesale Competition in Regions with Organized Electric Markets, Order No. 719*, FERC Stats. & Regs. ¶ 31,281 (2008) at P 154, *order on reh'g*, Order No. 719-A, 74 Fed. Reg. 37,776 (Jul. 29, 2009), FERC Stats. & Regs. ¶ 31,292, *order on reh'g and clarification*, Order No. 719-B, 129 FERC ¶ 61,252 (2009).

hour to operate. The demand response market participants that are the subject of this report contributed, on average, [redacted] of Non-spinning Reserve, either through accepted bids or self provision. These [redacted] represents [redacted]% of the ISO's hourly Non-spinning Reserve need for 2012.

In 2012, demand resources cleared (bid and self provided) an hourly maximum of [redacted] MW and a minimum of [redacted] MW of Non-spinning Reserve capacity to the ISO.

SUMMARY THE ISO'S DEMAND RESPONSE PROGRAMS FOR THE 2012 TIME PERIOD

Participating Load

In 2012, there were six (6) active Participating Load resources associated with large pumping resources.[7]

The active Participating Load resources in the reporting period can be broken down as follows:

Participant:	California Department of Water Resources State Water Project ("CDWR SWP")
No. of Resource IDs:	Total of six
	These Participating Load Resources represent an aggregation of pumps; they have been aggregated into separate Participating Load "facilities," for scheduling and settlement purposes.

Proxy Demand Resources

In 2012, there were nine active proxy demand resources. The active proxy demand resources in the reporting period can be broken down as follows:

Participant:	Pacific Gas and Electric ("PG&E")
No. of Resource IDs:	Total of seven
	These proxy demand resources represent an aggregation of retail service accounts assembled into seven unique resources for scheduling and settlement purposes.
Participant:	San Diego Gas & Electric ("SDG&E")
No. of Resource IDs:	Total of one
	This proxy demand resource represents an aggregation of retail service accounts assembled into a single resource for scheduling and settlement purposes.

[7] These six Participating Load resources are unique, non-pumped hydro storage facilities.

Participant:	Southern California Edison ("SCE")
No of Resource IDs:	Total of <u>one</u> This proxy demand resource represents an aggregation of retail service accounts assembled into a single resource for scheduling and settlement purposes.

<u>Reporting Period for this Report and the Time Constraints of the Data Set</u>

The reporting for the 2012 Annual Report reflects the same time constraints as the previous annual reports with respect to the time frames for which the data can be captured and conveyed by the January 15th due date. In order to produce and present relevant data consistent with the June 25, 2007 Order, the ISO must largely cull, correlate, and set out information compiled from a larger pool of underlying data in the ISO's settlement system. Thus, the ISO's information gathering is constrained by the structure of the ISO's settlement system and to the extent data can be timely analyzed and presented for inclusion in the 2012 Annual Report. The data set for this report runs from January 1, 2012 through November 30, 2012 ("Reporting Period") since not all December 2012 settlement data elements are timely available to incorporate into this report; therefore, data through the end of the calendar year cannot be gathered and complied for the full year before the report due date of January 15.

The January 1, 2012 to November 30, 2012 Reporting Period comprises:

- Ninety-two percent (92%) of the 2012 calendar year period,
- 8,016 hours out of 8,760 total hours in the calendar year, or
- 334 out of 365 calendar days.

For future reporting purposes, the ISO respectfully submits that future annual reports could convey better information if the filing deadline were shifted, so that the reporting period could capture an entire twelve (12) month, 365 day calendar year. Later in the year, the ISO will file a motion with the Commission, asking to change the reporting date, to present this issue to the Commission. The file date would be best adjusted to a period more than 90 days after the calendar-year end to ensure final settlement data can be analyzed and included in the report.

In addition, the ISO Department of Market Monitoring (DMM) produces an annual report on the performance of the markets administered by the ISO. This DMM annual report covers the period of January 1st through December 31st of the year that is the subject of the report, and is published in a late-March to April time frame. Information in the DMM annual report pertaining to subjects such as system resource adequacy, ancillary services quantities and market performance, and other subjects,

would be useful to ISO personnel in producing this annual report on demand response participation within the ISO markets.

NON-SPIN CAPACITY AWARDS AND PAYMENT FROM DEMAND RESPONSE RESOURCES

In the ISO's wholesale market, market participants can chose to bid Ancillary Services (such as Non-Spinning Reserves), or to self-provide them. Market participants that choose to bid ancillary services receive the Ancillary Service Market Clearing Price. Accordingly, the ISO makes payment to them for the ancillary service capacity type that was offered and accepted. On the other hand, those market participants that fulfill their ancillary service obligation by self-providing effectively receive an offset of their ancillary service obligation. The offset reduces or eliminates the quantity of ancillary service capacity that they must procure from the market.

On average, for the Reporting Period, the ISO system needed approximately 867 MW of Non-spinning Reserve capacity per hour to operate. This procurement average of 867 MW per hour is based upon the total ISO system requirement for non-spinning reserve capacity divided by the total number of hours for the reporting period of Jan 1, 2012 to Nov 30, 2012, which equates to 8,016 hours.

The range of Non-spinning Reserve capacity offered (or self provided) exhibited some variations during certain, limited hours in 2012. In this regard, Demand Response resources cleared (bid and/or self provided) an hourly maximum of [redacted] MW and a minimum of [redacted] MW of Non-spinning Reserve capacity on certain occasions. On average, however, [redacted] MW per hour was awarded or self-provided to the ISO for the Reporting Period from Demand Response resources.

TABLE 1 - Non-spinning Reserve Capacity Awards and Payment*

Total Non-spin Capacity Bid (MW)	Total Non-spin Capacity Awarded (MW)	Total Non-spin Capacity Payments ($)	Total Non-spin Capacity Self-provided (MW)
[redacted]	[redacted]	[redacted]	[redacted]

** These values represent cumulative totals based on all demand response resources.*

No-Pay for Unavailable Non-spin Capacity from Demand Response Resources

No-Pay is a settlement mechanism to encourage resources, both generators and Demand Response Resources, to keep awarded Ancillary Services available for ISO dispatch (i.e., by following dispatch instructions and by avoiding uninstructed

deviations). When triggered, the No-Pay mechanism results in the rescission of payment for the provision of Spinning Reserve and/or Non-spinning Reserve when, subsequent to: i) the ancillary service award for such ancillary services and ii) the ISO payment for the services, the ancillary service becomes either undispatchable capacity, unavailable capacity, undelivered capacity, or, in certain circumstances, unsynchronized capacity. In 2012, a small percentage of the total non-spinning capacity awarded to demand resources (approximately [redacted]%) was rescinded through the No-Pay settlement mechanism during the reporting period.

TABLE 2 - Summary of Unavailable Non-Spin Capacity

Total Non-spin Capacity Awarded and Self-provided (MW)	Total Non-spin Capacity Unavailable Subject to the No Pay Provision (MW)	Total Non-spin Capacity Payment Rescinded Subject to the No-Pay Provision ($)
[redacted]	[redacted]	[redacted]

Real-time Energy and Payment from Demand Response Resources

To meet its real-time reliability needs, the ISO dispatches real-time energy from dispatchable Demand Response resources when it is economic to do so, based on the submitted bids that the Scheduling Coordinator has submitted to the ISO for Demand Response resources. A Demand Response resource can bid to curtail energy. Per ISO real-time dispatch instructions, a Demand Response resource is paid for the amount of energy that the resource is instructed to curtail. (This is analogous to the ISO paying a generator to increase output ("INC") relative to the resource's scheduled energy amount.) Any deviations associated with the ISO's real-time dispatches, i.e. under-deliveries or over-deliveries, will be settled with the Demand Response resource as uninstructed energy. The *Total Energy Settlement* values shown in Table 3 and Table 4 below are the net settlement of the ISO's instructed and uninstructed energy for demand response dispatches.

TABLE 3- Decrease Energy Dispatches- Real-time Energy & Settlement Summary

Total Real-time Energy Offered (MW)	Total No. of Dispatches (Events)*	Total Real-time Instructed Energy (MWh)	Total Real-time Energy Delivered (MWh)	Total Real-Time Energy Settlement Payments to DR Resources ($)
448,832	11	2.92	2.99	$564.42

**Where dispatches equal to or greater than 0.015 MW, in any interval, are aggregated by*

trade hour.

TABLE 4- Increase Energy Dispatches- Real-time Energy & Settlement Summary				
Total Real-time Energy Offered (MW)	**Total No. of Dispatches (Events)***	**Total Real-time Instructed Energy (MW)**	**Total Real time Energy Delivered (MW)**	**Total Energy Charges to DR Resources ($)**
0	0	0	0	$0.00

**Where dispatches less than -0.015 MW, in any interval, are aggregated by trade hour.*

Real-time Energy Details for Demand Response Resources

See Appendix A to the 2012 Annual Report for a detailed breakdown of Real-time energy dispatch, by hourly event.

SUMMARY OF ISO EVENTS BY MONTH AND HOUR

ISO Real-time Dispatches by Month

Table 5 below lists the days and hours by month that Demand Response resources were called to curtail load, i.e. decrease energy and Table 6 lists the days and hours by month that Demand Response resources were called on to consume energy, i.e. increase energy consumption. Table 7 lists the number of dispatch events by hour for the Reporting Period.

TABLE 5 - Decrease Load
ISO Dispatches by Month

Month	Days	Hours
January	0	0
February	0	0
March	0	0
April	0	0
May	0	0
June	2	3
July	0	0
August	3	2
September	1	1
October	1	2
November	0	0
December	0	0
Total:	**7**	**8**

TABLE 6 - Increase Load
ISO Dispatches by Month

Month	Days	Hours
January	0	0
February	0	0
March	0	0
April	0	0
May	0	0
June	0	0
July	0	0
August	0	0
September	0	0
October	0	0
November	0	0
December	0	0
Total:	**0**	**0**

TABLE 7 ISO Dispatches by Hour

Hour Intervals																							
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Count of Dispatches per Interval																							
0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	5	8	1	0	0	0	0	0	0

SUMMARY ISO DEMAND RESPONSE RESULTS ACROSS COMPLIANCE YEARS

For 2012, the percentage of demand response contribution towards the ISO hourly average non-spinning reserve capacity requirement decreased to [redacted]% from approximately [redacted]% in 2011. Real-time energy offers from demand response decreased in 2012 compared to 2011 while the amount of energy the market required via economic dispatch from demand response increased. In 2011, [redacted] real-time energy demand response dispatches were issued whereas in 2012, only [redacted] were issued.

Below are summary tables of comparative results across compliance years:

TABLE 8
Annual DR Contribution to Hourly Avg. Non-spin Capacity Requirement

Compliance Reporting Year	Hourly Avg. Non-spin Requirement (MW)	Hourly Avg. Awarded Non-spin Quantity (MW)	Percentage of Hourly Non-spin Requirement (%)
2007	812	[redacted]	[redacted]%
2008	899	[redacted]	[redacted]%
2009	906	[redacted]	[redacted]%
2010	883	[redacted]	[redacted]%
2011	849	[redacted]	[redacted]%
2012	867	[redacted]	[redacted]%

TABLE 9
Year-to-Year Comparison of Non-spin Capacity from Demand Resources*

Comparison Years	Compliance Reporting Year	Total Non-spin Capacity Bid (% Diff)	Total Non-spin Capacity Awarded (% Diff)	Total Non-spin Capacity Self-Provided (% Diff)
2007/2008	2008	15.7%	-31.9%	-17.9%
2008/2009	2009	-9.0%	-83.6%**	164.6%**
2009/2010	2010	-52.3%	-67.0%	57.2%
2010/2011	2011	181.6%	-64.4%	5.8%
2011/2012	2012	70.4%	1,554.7%	-61.9%

(-) is a decrease and (+) is an increase in percentage difference between years
*** Significant increase in the amount of Non-spin capacity self-provided in 2009 vs. 2008***

TABLE 10
Year-to-Year Comparison of Compliance from Demand Resources Providing Non-spin*

Comparison Years	Compliance Reporting Year	Total Non-spin Capacity Awarded and Self-Provided (% Diff)	Total Non-spin Capacity Unavailable Subject to No Pay (% Diff)	Total Non-spin Capacity Payment Rescinded Due to No Pay Provision (% Diff)
2007/2008	2008	-26.9%	-18.0%	-69.0%
2008/2009	2009	15.0%	-72.3%	-21.3%
2009/2010	2010	46.5%	365.9%	6.2%
2010/2011	2011	4.5%	-90.2%	-99.5%
2011/2012	2012	-51.2%	1,884.4%	97,998.6%

(-) is a decrease and (+) is an increase in percentage difference between years

TABLE 11
Year-to-Year Comparison of Real-time Energy from Demand Resources (Load Curtailments)*

Comparison Years	Compliance Reporting Year	Total Real-time Energy Offered (% Diff)	Total No. of Dispatches	Total Real-time Energy Instructed (% Diff)	Total Real-time Energy Delivered (% Diff)
2007/2008	2008	-25.5%	55.4%	16.1%	1.2%
2008/2009	2009	-55.4%	320.8%	-22.1%	-0.4%
2009/2010	2010	252.2%	-67.1%	-67.4%	-63.2%
2010/2011	2011	149.8%	86.4%	33.4%	-12.7%
2011/2012	2012	-75.3%	-96.9%	-99.6.0%	-99.5%

***** *(-) is a decrease and (+) is an increase in percentage difference between years*

REAL TIME DATA BY HOURLY EVENT			
Day	**Hour**	**Data**	**Value**
6/18/2012	14	Real-time Energy; (MW)	0.153
		RT Energy Delivered; (MW)	0.00
		Energy Payment; ($)	-$3.08
		Hourly Avg. System Load; (MW)	34,549
	15	Real-time Energy; (MW)	0.143
		RT Energy Delivered; (MW)	0.00
		Energy Payment; ($)	-$3.54
		Hourly Avg. System Load; (MW)	35,234
6/19/2012	14	Real-time Energy; (MW)	0.153
		RT Energy Delivered; (MW)	0.28
		Energy Payment; ($)	-$6.60
		Hourly Avg. System Load; (MW)	32,147
	15	Real-time Energy; (MW)	0.150
		RT Energy Delivered; (MW)	0.00
		Energy Payment; ($)	-$2.90
		Hourly Avg. System Load; (MW)	33,120
	16	Real-time Energy; (MW)	0.026
		RT Energy Delivered; (MW)	0.01
		Energy Payment; ($)	-$0.73
		Hourly Avg. System Load; (MW)	33,884
8/13/2012	16	Real-time Energy; (MW)	0.338
		RT Energy Delivered; (MW)	0.43
		Energy Payment; ($)	-$172.00
		Hourly Avg. System Load; (MW)	46,886
	17	Real-time Energy; (MW)	0.371
		RT Energy Delivered; (MW)	0.16
		Energy Payment; ($)	-$3.23
		Hourly Avg. System Load; (MW)	46,719
8/14/2012	16	Real-time Energy; (MW)	0.351
		RT Energy Delivered; (MW)	0.33
		Energy Payment; ($)	-$55.62
		Hourly Avg. System Load; (MW)	45,796
	17	Real-time Energy; (MW)	0.055
		RT Energy Delivered; (MW)	0.48
		Energy Payment; ($)	-$144.68
		Hourly Avg. System Load; (MW)	45,655

8/15/2012	16	Real-time Energy; (MW)	0.526
		RT Energy Delivered; (MW)	0.39
		Energy Payment; ($)	-$78.85
		Hourly Avg. System Load; (MW)	42,922
	17	Real-time Energy; (MW)	0.402
		RT Energy Delivered; (MW)	0.51
		Energy Payment; ($)	-$69.62
		Hourly Avg. System Load; (MW)	42,557
9/12/2012	17	Real-time Energy; (MW)	0.316
		RT Energy Delivered; (MW)	0.00
		Energy Payment; ($)	-$30.57
		Hourly Avg. System Load; (MW)	39,455
10/17/2012	15	Real-time Energy; (MW)	0.167
		RT Energy Delivered; (MW)	0.24
		Energy Payment; ($)	-$12.35
		Hourly Avg. System Load; (MW)	35,046
	18	Real-time Energy; (MW)	0.008
		RT Energy Delivered; (MW)	0.15
		Energy Payment; ($)	-$8.60
		Hourly Avg. System Load; (MW)	34,210

CERTIFICATE OF SERVICE

I hereby certify that I have served the foregoing document upon the parties listed on the official service list in the above-referenced proceeding, in accordance with the requirements of Rule 2010 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2010).

Dated at Folsom, California this 16th day of April 2013.

/s/ Sarah Garcia
Sarah Garcia