Docket No.: R.12-03-014

Exhibit No.: _____

Date: July 23, 2012

Witness: Jeffrey K. Shields

ALJ: David Gamson

REPLY TESTIMONY OF SOUTH SAN JOAQUIN IRRIGATION DISTRICT CONCERNING LONG TERM PROCUREMENT PLAN TRACK 1: LOCAL RELIABILITY ISSUES

INTRODUCTION AND SUMMARY

Q: Please describe SSJID.[1]

A: The South San Joaquin Irrigation District ("SSJID") is a special district formed in May 1909 pursuant to the Wright-Bridgeford Act, the predecessor of the California Water Code, for the purpose of providing a reliable, economic source of irrigation water for the cities of Escalon, Ripon and Manteca, and portions of unincorporated San Joaquin County.[2] SSJID is currently an electric customer of Pacific Gas & Electric ("PG&E") and the Modesto Irrigation District, and its service territory includes approximately 38,000 PG&E accounts.

Q: What is SSJID's interest in this proceeding?

A: SSJID has filed an application with the San Joaquin Local Agency Formation Commission announcing its plans to expand the scope of the services it provides to include retail electric service within its existing service territory. SSJID intends to do so by acquiring certain existing electric distribution facilities currently used by PG&E to provide service in the area and making additional investments in new infrastructure necessary to upgrade these facilities, increase system reliability, improve customer service, and bring down the long-term cost of retail electric service. SSJID decided to take such action only after evaluating the costs and potential benefits of providing electric service, and concluding that expanding the scope of the services it provides could provide significant net benefits to customers within its service territory. SSJID expects these benefits to include:

[1] Please see Attachment A for witness qualifications and resume.

[2] Special Districts in California are local units of government established by the residents of an area to provide a service not provided by a county or city. SSJID operates under the direction and control of its Board of Directors, the members of which are elected by, and ultimately answerable to, the voters in the district. SSJID currently provides irrigation services to 3,600 customer accounts within its service area; wholesale treated water to the cities of Tracy, Escalon, Manteca, and Lathrop; and through its ownership interest in hydroelectric generating facilities, wholesale electric service.

- a 15% reduction in electric rates;
- improving the local economy;
- improving service quality and reliability;
- local accountability and responsibility for electric resource policies and practices; and
- a means to effectively distribute the economic benefits of SSJID's ownership of certain hydroelectric generating facilities.

In the Scoping Memo and Ruling of the Assigned Commissioner and Administrative Law Judge, the Commission indicated that this proceeding would address how local reliability capacity costs should be allocated among load-serving entities ("LSEs") in light of the cost allocation mechanism ("CAM") and whether the CAM should be modified at this time.[3] SSJID is concerned about the possibility that CAM costs, including local reliability capacity costs, could potentially be assigned to SSJID. Allocation of CAM costs to SSJID would be inappropriate, would have potentially significant anti-competitive effects, could affect SSJID's ability to offer the same rate reductions to its customers as currently planned, and could diminish the local control benefits associated with municipalization.

Q: Does the testimony jointly filed by the Alliance for Retail Energy Markets ("AReM"), the Direct Access Customer Coalition ("DACC"), and the Marin Energy Authority ("MEA") address these concerns?

A: No, while I support the testimony of AReM, DACC, and MEA in favor of minimizing CAM procurement, modifying the net capacity cost calculation, and establishing an LSE

[3] R.12-03-014, Scoping Memo and Ruling of the Assigned Commissioner and Administrative Law Judge at 6 (May 17, 2012).

opt-out mechanism,[4] their testimony considers CAM issues from the perspective of direct access and Community Choice Aggregation ("CCA"). It does not address the particular circumstances of municipal departing load customers and neglects to identify the important distinction between publicly owned utility ("POU") customers and direct access/CCA customers with respect to CAM cost allocation.

Q: What is the purpose of your testimony?

A: This testimony is provided in response to testimonies filed by Southern California Edison ("SCE") and San Diego Gas & Electric ("SDG&E"). SSJID disagrees with SDG&E and SCE's characterization of "benefiting customers" under the CAM. This testimony also touches upon issues raised in the testimony filed by AReM, DACC, and MEA.

Q: Did you submit opening testimony in this proceeding?

A: No. This is my first testimony in this proceeding.

Q: Please summarize your testimony.

A: My testimony is summarized as follows:

- The Commission has previously exempted existing POU customers and municipal departing load, with the exception of large municipalizations, from CAM cost allocation.
- SSJID believes that its municipal departing load should not be classified as a large municipalization, as defined by the Commission, and that it should be exempt from CAM cost allocation as outlined in Decision ("D") 08-09-012.

[4] R.12-03-014, Testimony of AReM, DACC, and MEA at 4-8 (June 25, 2012).

- The Commission has yet to make a determination of whether SSJID will be classified as a large municipalization, and as a result SSJID remains concerned about the appropriate treatment of large municipalizations with respect to CAM treatment.
- There are compelling reasons for exempting all POUs, including large municipalizations, from CAM cost allocation.
- California law does not require that POUs or municipal departing load of any size be included as "benefiting customers" for purposes of CAM cost allocation.
- POUs do not present the same capacity procurement risks as direct access or CCA load might present.
- Current and future POU customers may not be able to use the resource adequacy ("RA") credits allocated under the CAM process and could be required to resell the credits in order to realize any benefit from the CAM program. If the POU could not use or resell the RA credits, the CAM charge would constitute a tax on municipal customers.
- While the Commission has proposed an alternate methodology for allocation of RA costs and benefits to large municipalizations, the methodology relies on an approximation of the value of the RA credit, which is currently impractical.
- The Commission should therefore exempt all existing and future POUs, including large municipalizations, from CAM responsibility.

ALL CURRENT AND FUTURE PUBLICLY OWNED UTILITIES SHOULD BE EXCLUDED FROM COST ALLOCATION MECHANISM RESPONSIBILITY

Q: What is the CAM?

A: The CAM is a mechanism established by the Commission to assure construction of adequate new capacity and to allocate the costs and benefits of the acquired capacity to all customers that benefit from capacity procurement.[5] The CAM was established in D.06-07-029 and later modified by D.07-09-044, D.08-09-012, D.11-05-005, and SB 695. Under the CAM, the costs of RA capacity are approximated and allocated to all "benefiting customers" along with the associated RA credits. The Commission originally determined that "[b]enefiting customers are defined as all bundled service customers, direct access customers and CCA customers. Benefiting customers are also other customers who are located within a utility distribution service territory, but take service from a local (POU) subsequent to the date the new generation goes into service."[6] The Commission later refined this definition to specifically exclude municipal departing load, with the exception of large municipalizations, from the class of benefiting customers.[7]

Q: How did the IOUs address the definition of "benefiting customers" in their prepared testimonies?

A: In SDG&E's prepared testimony the utility stated, "the Commission should find that benefitting parties are those parties that have load in the reliability area."[8] In SCE's prepared testimony Edison argued, "the cost to SCE of procuring the [local capacity

[5] D.06-07-029, mimeo at 4 and 7.
[6] *Id.*, mimeo at 26 (fn 21).
[7] D.08-09-012, mimeo at 104 (Conclusion of Law 3 and 4).
[8] R.12-03-014, Prepared Track 1 Testimony of San Diego Gas & Electric Company at 11 (June 25, 2012).

requirement ("LCR")] resources should be equally and fairly allocated to all LSEs and non-jurisdictional POUs in the CAISO balancing area."[9] SCE went on to acknowledge that "the Commission has no authority to order cost allocation to the non-jurisdictional POUs,"[10] and concluded that "the existing CAM should be used to recover the cost of the new [local capacity requirements] from all benefiting customers, including bundled service, direct access, and CCA customers."[11] PG&E did not submit opening testimony in this proceeding.

Q: Do you agree with the IOUs' characterization of benefiting customers?

A: No. The definition of benefiting customers as all parties with load in the local reliability area would seem to include non-CPUC jurisdictional POUs that are already in operation, as well as municipal departing load of any size. As discussed below, POUs procure their own RA capacity and cannot be reasonably considered benefiting customers. In addition, allocation of costs to existing non-jurisdictional POUs is outside the authority of the Commission, as acknowledged by SCE, and is contrary to the definition of benefiting customers provided in D.06-07-029.[12] Allocation of costs to small municipal departing load is also contrary to prior Commission judgment.[13]

[9] R.12-03-014, Prepared Track 1 Testimony of Southern California Edison at 26 (June 25, 2012).
[10] *Id.*
[11] *Id.*
[12] D.06-07-029, mimeo at 26.
[13] D.08-09-012, mimeo at 104 (Conclusion of Law 3).

Q: What is municipal departing load, and what has the Commission already determined with respect to municipal departing load responsibility for CAM charges?

A: Municipal departing load is the load associated with bundled customers that transfer to POU service, such as when a new POU is formed, and load that has never been served by an IOU but locates in an area that had previously been part of the IOUs service territory and is served by a POU.[14]

In D.08-09-012, the Commission expressly excluded municipal departing load, with the exception of "large municipalizations," from CAM responsibility.[15] Smaller municipal departing load was excluded on the grounds that municipal departing load should not pay any charges related to new generation resources that were not procured on their behalf, and by definition, municipal departing load that is not considered a large municipalization has been accounted for in the IOUs' long-term procurement plan ("LTPP") departing load forecasts, and no resources have been procured on their behalf.[16]

Q: What are large municipalizations, and why are they treated differently?

A: The Commission has provided the following guidance regarding "large municipalizations:"

> While there is no precise measure of what constitutes a "large municipalization," in the context of this decision, we are defining "large municipalization" as any portion of an IOU's service territory that has been taken control of or annexed by a POU where the amount of load departing the IOUs' service territories due to the municipalization is of such a large magnitude that it cannot reasonably be assumed to have been reflected as part of the historical [municipal departing load] trends used in developing the adopted LTPP load forecasts.[17]

[14] *Id.*, mimeo at 2.
[15] *Id.*, mimeo at 104 (Conclusion of Law 3).
[16] *Id.*, mimeo at 104 (Conclusion of Law 1 and 3).
[17] *Id.*, mimeo at 27.

In a 2008 decision, the Commission evaluated how large municipalizations should be treated with respect to the CAM charge and concluded, "For departing loads of large municipalizations that are not reflected in the historical trends used in developing the adopted LTPP load forecasts, the IOUs should file an application requesting a Commission determination of the fair share of these customers for paying the [CAM charges]."[18] Absent such an application it is unclear whether customers of a large municipalization would be determined responsible for any "fair share" of CAM charges.

Q: Should SSJID be considered a large municipalization?

A: No. The total load of SSJID's service territory represents only a small fraction of PG&E's total service area load. According to recent data, SSJID is expected to have an average annual energy requirement of approximately 571,900 MWh. This amounts to only 0.67% of PG&E's annual energy requirement.[19] SSJID believes that the amount of load affected by its municipalization plan is not so large that it cannot reasonably be assumed to have been reflected as part of the historical municipal departing load trend used in developing the adopted utility LTPP load forecasts and therefore should be considered exempt from CAM responsibility under D.08-09-012. However, the Commission has not made a final determination regarding this issue and SSJID remains concerned about the appropriate treatment of large municipalizations with respect to CAM responsibility.

[18] *Id.*, mimeo at 104 (Conclusion of Law 4).
[19] 0.67% = 571,906 MWh SSJID load / 85,625,179 MWh PG&E load. Aspen Environmental Group. "Draft Subsequent Environmental Impact Report: South San Joaquin Irrigation District Plan to Provide Retail Electric Service, Sphere Plan, MSR, and Annexation." State Clearinghouse No. 2005102018 at 3.13-2, 3.13-3, provided as Attachment B (November 2011).

Q: Is there a statutory requirement for assigning CAM costs to large municipalizations?

A: No. California Public Utilities Code Section 365.1 (c)(2)(A) (SB 695), which addressed the CAM, states:

> [T]he net capacity costs of those generation resources are allocated on a fully nonbypassable basis consistent with departing load provisions as determined by the commission, to all of the following:
> (i) Bundled service customers of the electrical corporation.
> (ii) Customers that purchase electricity through a direct transaction with other providers.
> (iii) Customers of community choice aggregators.

In D.11-05-005 the Commission concluded that subsections i, ii and iii refer to bundled, direct access, and CCA, respectively.[20] This is consistent with the subsequent paragraph of this statute, which states that the capacity costs should be distributed in a manner that is fair and equitable to customers who "receive electric service from the electrical corporation, a community choice aggregator, or an electric service provider."[21] The statute does not indicate that municipalizations of any size should be included as benefiting customers.

Q: Should large municipalizations be considered "benefiting customers" in the context of CAM treatment?

A: No. In D.06-07-029, the Commission described the rationale for allowing the IOUs to share long-term capacity procurement costs with benefiting customers. Among the primary concerns were that direct access electric service providers (ESPs) operate with short-term commitments from customers and therefore do not have a business model that

[20] D.11-05-005, mimeo at 8.
[21] California Public Utilities Code Section 365.1 (c)(2)(B).

supports investment in long-term contracts.[22] In addition, the Commission expressed concern that in the event of a capacity shortfall, an ESP may turn its customers back to the IOU and, in the short period of time between which the ESP shortfall is discovered and the capacity is needed, the IOU would be unable to procure additional capacity to meet demand.[23]

These arguments do not apply to existing POUs or to municipal departing load. A POU operates in a different manner from a direct access or CCA provider. POU operations are conducive to long-term contracts and are not subject to the customer-base uncertainty experienced by retail ESPs. As an example, in preparation for municipalization, SSJID has undergone extensive analysis and planning for procurement of reliable electric capacity over a thirty-year time frame. Once municipalization is approved, SSJID will be well positioned to procure long-term capacity on behalf of its customers, and SSJID fully intends to procure sufficient capacity to satisfy local RA requirements. In addition, in the hypothetical event of a capacity shortfall such as described in D.06-07-029, SSJID would bear the burden of the capacity shortfall itself and would not be able to turn its customers back to the IOU. It is therefore unnecessary and inappropriate for the IOUs to procure long-term capacity on behalf of existing or future POUs, and neither existing nor new POU customers should be considered among the class of "benefiting customers" responsible for CAM costs.

Q: Would large municipalization customers benefit from RA credit allocation under the

[22] D.06-07-029, mimeo at10 and 60 (Conclusion of Law 3).
[23] *Id.*, mimeo at 9.

CAM?

A: The Commission has previously determined that large municipalization customers would not benefit from these credits. In D.08-09-012, the Commission acknowledged that prior adopted proposals "are not clear as to what [large municipalization] customers are supposed to do with their allocated RA credits."[24] The Commission also pointed out that "[t]here is no direct use of RA credits" for these customers, that "IOUs are not to be procuring system reliability resources on behalf of POUs," and that the customer would need to find "an LSE who has use for such credits" and resell the credits in order to realize any benefit.[25] If the POU cannot use or resell the RA credits, the CAM charge becomes simply a tax, and potentially an unlawful tax, on POUs and municipal customers.

Q: Has the Commission considered an alternate methodology for allocating RA benefits to large municipalizations?

A: Yes. The Commission found that the allocation and re-selling of RA credits by departed customers would be burdensome and proposed an alternative methodology by which only the uneconomic costs of IOU RA capacity procurement would be borne by departed customers.[26] The Commission proposed that the value of the RA credit be netted out of the CAM charge allocated to large municipalizations. Per this methodology, "[t]he departing customer would be responsible for any uneconomic costs which in this case are represented by the total annual PPA cost, less energy auction revenues, less the value of the RA credit."[27]

[24] D.08-09-012, mimeo at 83.
[25] *Id.*
[26] *Id.*, mimeo at 83-84.
[27] *Id.*, mimeo at 83.

Q: Is this an appropriate methodology for allocating RA costs and benefits to large municipalization customers?

A: No. This methodology falls short in its attempt to approximate the "value of the RA credit." The Commission notes that this value "could be determined by analyzing the ongoing market transactions for such products."[28] This proposal ignores the fact that the entire rationale for the energy auction and/or proxy calculation methodology outlined in the CAM proposal is to approximate the value of RA credits. If it were possible to reliably approximate the value of RA capacity based on "ongoing market transactions for such products," the CAM energy auction and/or proxy calculation process would be unnecessary. The proposal to determine the "uneconomic costs" of the IOUs' RA credit procurement and to allocate those costs to large municipalizations is therefore impractical.

Q: Are there any other issues with the allocation of RA costs and benefits to large municipalization customers?

A: Yes. As described in the testimony of AReM, DACC and MEA, it is possible that the CAM charge derived from an energy auction or proxy calculation could result in a negative imputed value of RA capacity.[29] If this were the case, in order to maintain bundled customer indifference, the IOU would need to pass the residual CAM revenues on to the large municipalization customers. Since large municipalization customers would not be benefiting from the RA credits, the IOU would additionally need to compensate them at an appropriate rate for the RA credits that were procured on their behalf, but used by the IOU for RA compliance. As described above, approximation of such a rate for RA credits is

[28] *Id.*, mimeo at 83 (fn 74).
[29] Testimony of AReM, DACC, and MEA at 49.

impractical at this time.

Furthermore, as illustrated by the Commission's proposal for assigning the uneconomic costs of RA capacity to large municipalization, under the CAM, the IOUs could procure capacity at above-market prices and then pass these above-market costs on to POUs and other load-serving entities. SSJID intends to procure its capacity at prices that are at or below market prices. Even if SSJID were able to use the RA credits, it would be unfair to force SSJID to procure RA capacity from PG&E at a higher price than it could procure from its preferred suppliers.

Q: Should municipal departing load and existing POUs be excluded from CAM responsibility?

A: Yes. As described above, California law requires that CAM responsibility be allocated only to bundled, direct access, and CCA customers. The law does not require CAM allocation for municipal departing load of any size, and the Commission does not have the jurisdiction to levy charges on existing POUs. The concerns over long-term RA capacity procurement do not apply to municipal departing load and existing POUs. POUs have the appropriate resources and responsibilities for long-term procurement and cannot burden IOU customers in the event of a capacity shortfall. The Commission has acknowledged that "the IOUs are not to be procuring system reliability resources on behalf of POUs"[30] and the POUs have no use for the RA capacity credits allocated as "benefits" under the proposed CAM allocation mechanism. Imposing CAM RA capacity costs on POUs would also economically benefit IOU customers and disadvantage POUs and could thereby have

[30] D.08-09-012, mimeo at 83.

potentially significant and unlawful anticompetitive effects.

Q: Would excluding POU customers from CAM responsibility give these customers a "free ride," as SDG&E has alleged with respect to load-serving entities that opt out of the CAM?[31]

A: No. Since POUs procure their own RA capacity and are not relying on IOU procurement even as a backstop measure, the "free ride" analogy does not apply. POUs pay for their own ride and are simply not interested in catching a ride from the IOUs.

Q: Does this conclude your prepared reply testimony?

A: Yes.

[31] Prepared Track 1 Testimony of San Diego Gas & Electric Company at 12.

Attachment A

Statement of Qualifications and Resume of Jeffrey K. Shields

STATEMENT OF QUALIFICATIONS OF JEFFREY K. SHIELDS

Q: Please state your name and business address.

A. My name is Jeffrey K. Shields and my business address is 11011 East Highway 120 Manteca, CA 95336.

Q: By whom are you currently employed and in what capacity?

A. I am currently the General Manager of South San Joaquin Irrigation District ("SSJID" or the "District"). As the General Manager, I am ultimately responsible for leading SSJID on all matters related to its business, including the operation and management of its water assets, the management of its hydroelectric generating facilities, the District's electric accounts with Pacific Gas and Electric Company and the Modesto Irrigation District, and the District's plan to provide retail electric service within its service territory. I also serve as Treasurer of the Board for The Utility Reform Network ("TURN").

Q: Briefly summarize your educational background and professional experience.

A. I have over 28 years experience involving municipal finance, formation of new public power enterprises, utility management, development of new generation assets, and power marketing. Among my representative experience is serving as Chief Executive Officer and General Manager of Trinity County Public Utility District. In that capacity, I was responsible for all aspects of the utility's operation including its power portfolio, load analysis, rate design, and Board Policy. Similar to my experience at Trinity, I have also served as Chief Executive Officer and General Manager of Emerald Public Utility District in Eugene, Oregon. While at Emerald, I had ultimate responsibility for all utility expansion projects, including several transmission and distribution line upgrades. My complete resume follows this Statement.

Q: Have you previously testified in front of the Commission?

A. Yes. I previously testified in PG&E's 2007 GRC application proceeding and PG&E's 2011 GRC application proceeding. I also testified before the Commission at the March 17, 2010, Informational Hearing on Proposition 16.

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email: jshields@ssjid.com
ph: 209.249.4645

Experience

2004-Present South San Joaquin Irrigation District Manteca, CA
Utility Systems Director
SSJID is owner of a series of hydro-electric generating plants and a sophisticated system of irrigation and domestic water delivery systems. My responsibilities include advising SSJID on options to utilize the output of their hydro plants, track energy matters on behalf of the District and pursue development of a retail electric distribution enterprise.

2003-2004 Utility Systems Associates, Inc. Portland, OR
Principal
Under contract with various clients, I have provided expert witness services, assisted municipal entities in formation of utility distribution operations, consulted on acquisition of corporate assets, served as intermediary for project financing and assisted in securing transmission for renewable energy projects.

2001-2003 UBS Warburg Energy, LLC Portland, OR
Director, West Power Marketing
Negotiate enabling documents (WSPP & EEI) to facilitate power marketing.

2000-2001 Enron North America Portland, OR
Director, West Origination
Responsible for asset acquisition and development and management of business relationships with consumer-owned utilities and Federal Power Marketing Administrations.

1991-2000 Emerald People's Utility District Eugene, OR
General Manager/CEO
General Manager of an electric generation and distribution utility. Responsibilities included management of human resources, consumer and public relations, physical plant, finance, policy development and administration, expert witness and presentation of testimony before state and federal regulatory and governing authorities.

1984-1990 Trinity Public Utility District Weaverville, CA
General Manager/CEO
Trinity PUD was formed in 1982 as a result of a ballot measure that I drafted and submitted to the voters of the community of Weaverville, (Trinity County) California while I was Planning Director. In 1984 the Board of Directors terminated the management contract they had with CP National and hired me as their first GM. Responsibilities included designing a new organizational structure and operating policies. In 1986 the Board authorized me to assist Hayfork Valley in acquiring the assets of PG&E and form a new utility operated under a mutual aid agreement with Trinity PUD.

1979-1984 County of Trinity Weaverville, CA
Director of Land Use Planning
Executive Director of land use planning department for a rural Northern California County. Responsible for staffing, budgeting, policy development and administration. I also served as Executive Officer of the Local Agency Formation Commission which is responsible for assuring the efficient provision of essential public services between local governments such as water, wastewater, fire and other public safety organizations.

1978-1979 Eco-Impact Consulting Dunsmuir, CA
Sr. VP
Responsible for preparation of CEQA compliance documents for private development and local government projects in Northern California. I assisted in preparation of EIR's and related documentation and made presentations before local regulatory agencies.

Education

Associate of Science January 1975
Shasta College, Redding, CA
Course of Study: Biological Science

Bachelor of Science March 1978
California State University at Humboldt, Arcata CA
School of Natural Resources Management

Professional Activities

Guest lecturer:
U.S. Air Force Academy, Senior Cadet Business Program
California State University at Humboldt, Political Science
Oregon State University, Fisheries management
University of Oregon, Environmental Law
Board of Directors, American Samoa Power Authority 1996-2003

Executive Board, Northwest Public Power Council	1993-2000
Executive Board (Chairman), Northwest Energy Coalition	1994-2000
Board of Directors, California Special Districts Risk Management Authority	1983-1987
Board of Directors, Utility Energy Forum	1994-2000
Executive Board, Transmission Agency of Northern California	1986-1989

Military

U.S. Air Force	Honorable Discharge	July 1968-July 1972

Recognitions

American Public Power Association Hobart Award
Northwest Energy Coalition Headwaters Award
California Public/Private Joint Venture Council: Best and Brightest Award
Northwest Steelheaders Association: Life Member Award
Rotary International Foundation: Paul Harris Fellowship
Trinity County Legal Secretaries Association: Boss of the Year 1989
Oregon Business Magazine: Emerald PUD "#1 Work Place in Oregon, 2000"

3125/003/X56742.v1

Attachment B

Aspen Environmental Group. "Draft Subsequent Environmental Impact Report: South San Joaquin Irrigation District Plan to Provide Retail Electric Service, Sphere Plan, MSR, and Annexation." November 2011. Chapter 3.13

DRAFT SUBSEQUENT
Environmental Impact Report

South San Joaquin Irrigation District (SSJID)
Plan to Provide
Retail Electric Service,
Sphere Plan, MSR,
and Annexation

(SCH No. 2005102018)

Prepared for

San Joaquin Local Agency Formation Commission

Prepared by

Aspen Environmental Group

November 2011

3.13 Energy Conservation

Overview of Impacts

The analytical approach taken by this Subsequent EIR is described in Section 3.0 (Introduction to Environ mental Analysis). The following section provides a description of energy resources and energy conserva tion as they pertain to the SSJID area and services. An analysis of cumulative impacts from other past, present and reasonably foreseeable projects is included in Section 5 (Cumulative Impacts) of this Subse quent EIR.

The 2006 Final EIR for the plan to provide retail electric service did not include analysis of energy use. In late December 2009, the California Natural Resources Agency adopted certain amendments to the State CEQA Guidelines for reviewing the environmental impacts of energy use. These amendments became effective in mid March 2010, and became requirements for most agencies to follow roughly 120 days later. (See CEQA Guidelines, §15007, subd. (d).) In light of these amendments, this section describes how the proposed project would not cause any adverse impact due to inefficient, wasteful, or unnecessary consumption of energy.

This table summarizes the impacts to energy resources for each of the four actions evaluated in this EIR.

8 . - :	N	N	N	N
8 . - : I	N	N	N	N
8 . - : I	N	N	N	N
8 . - -4:	N	N	N	N
8 . - : I	N	N	N	N
8 . - :	N	N	N	N

3.13.1 Existing Setting

3.13.1.1 Scope of Analysis for Energy Conservation

The proposed plan to provide retail electric service could cause changes in how electrical energy and other energy resources are used in the SSJID territory. In order to assure that energy implications are con sidered in public agency decisions, CEQA requires that EIRs include a discussion of the potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful and

unnecessary consumption of energy (see Public Resources Code section 21100(b)(3)). According to Appendix F of the State CEQA Guidelines, the goal of conserving energy implies the wise and efficient use of energy including: (1) decreasing overall per capita energy consumption; (2) decreasing reliance on natural gas and oil; and (3) increasing reliance on renewable energy sources. Some aspects of the energy use analysis are limited by the CEQA Guidelines (Section 15145), which allows the lead agency to find that certain impacts may be too speculative for evaluation.

Baseline Energy Consumption

Currently (2011) the average annual energy requirement in the SSJID territory is approximately 571,900 megawatt hours (MWh) of electricity.[1] PG&E and MID generate and/or purchase electricity to meet the demand in the SSJID territory. Future (2040) average annual energy demand across all customer classes within the SOI is projected to increase to about 1,006,000 MWh (MSR Table 4-5, 2011). This forecast of projected energy demand is likely to over predict demand somewhat based on California Energy Commission (CEC) historic data and forecasts. As such, the MSR provides a conservatively high forecast of future energy demand because more existing and new customers would use energy conservation tools (*e.g.*, home/business energy management systems) and some customers may install on site electricity generation technologies (*e.g.*, distributed generation using solar, wind, or methane digestion, or geothermal heat pumps).

Table 3.13-1 shows the electrical energy demand in the SSJID territory.

Table 3.13-1. Baseline and Projected Population and Energy Demand inside SSJID Boundary

Year	Projected Population	Energy Demand in SSJID (MWh)	Overall Per Capita Demand (MWh/person)
2011	102,998	571,906	5.55
2015	113,117	618,098	5.46
2020	127,358	681,174	5.35
2025	143,393	750,751	5.24
2030	161,446	827,502	5.13
2035	181,772	912,171	5.02
2040	204,657	1,005,578	4.91

Source: Sphere Plan/MSR, Table 3-2 and Table 4-5 (2011).
Note: Estimates include all customer classes.

Table 3.13-2 shows the baseline electricity consumption in San Joaquin County. It also shows the proportion of PG&E's total that is consumed within the County. San Joaquin County represents one sixth to one fifth of PG&E's agricultural demand. Industrial demand also is disproportionately high; mining and construction consumption is relatively low. Each residential household in San Joaquin County uses about 650 to 700 kWh per month, on average, based on the residential consumption in Table 3.13-2 and the U.S. Census Bureau identification of 207,667 households in the County (2005-2009; US Census, 2011).

[1] The baseline electricity demand in the SSJID territory cannot be determined with certainty because the data is maintained by PG&E.

Table 3.13-2. Electricity Consumption in San Joaquin County (MWh)

					Percent of PG&E Sales		
Sector	**2006**	**2007**	**2008**	**2009**	**2006**	**2007**	**2008**
Agricultural & Water Pump	870,121	887,766	909,905	—	21.6%	16.9%	16.0%
Commercial Building	1,685,607	1,654,622	1,627,277	—	5.5%	5.3%	5.2%
Commercial Other	253,099	271,284	267,592	—	6.2%	6.3%	5.7%
Industry	934,096	982,927	983,203	—	7.6%	8.2%	8.3%
Mining & Construction	44,454	50,064	38,509	—	2.4%	2.4%	1.8%
Residential	1,694,343	1,693,239	1,735,552	1,732,374	5.5%	5.5%	5.5%
Streetlight	28,049	28,763	29,128	—	6.3%	6.4%	6.3%
2009 Report: Non-Residential	—	—	—	3,731,461	6.3%	6.4%	6.3%
Total San Joaquin County Usage (MWh)	**5,509,768**	**5,568,666**	**5,591,165**	**5,463,835**	**6.5%**	**6.5%**	**6.3%**

Source: CEC, 2010a; CEC, 2011. Note: Sector detail not reported for 2009.

Table 3.13-3 shows the baseline electricity consumption for the entire PG&E territory.[2] While demand rose over the 2006 to 2008 period, more recent data filed in PG&E's 2011 General Rate Case under consideration by the California Public Utilities Commission (CPUC dockets for A.09-12-020 and A.10-03-014) indicate that consumption declined in 2009.

Table 3.13-3. Electricity Consumption in Entire PG&E Territory (MWh)

Sector	**2006**	**2007**	**2008**	**2009**
Agricultural & Water Pump	4,029,580	5,240,695	5,685,737	5,820,641
Commercial Building	30,642,666	31,458,952	31,579,782	30,596,611
Commercial Other	4,098,340	4,335,763	4,697,334	4,431,287
Industry	12,313,866	11,933,823	11,816,005	10,629,273
Mining & Construction	1,863,310	2,099,845	2,158,907	2,149,269
Residential	30,822,780	30,797,140	31,727,296	31,535,580
Streetlight	443,740	447,085	458,769	462,519
Total PG&E Usage (MWh)	**84,214,282**	**86,313,302**	**88,123,830**	**85,625,179**

Source: CEC, 2011.

SSJID estimates peak power demand for the customers it proposes to serve in its territory and in areas served by the facilities extending outside the SSJID territory to be 172 MW, with potential growth to 432 MW by 2040. These estimates were based on the population and customer demand growing along with growth in the peak demand to plan for adequate engineering of the proposed SSJID system (MSR Table 4-6, 2011). Table 3.13-4 summarizes the current and forecasted peak period demand data for the SSJID territory.

[2] Note that this includes both bundled and direct access sales, which differs from the bundled-only deliveries shown elsewhere in this EIR (Section 3.12, Greenhouse Gas Emissions). Direct access allows certain large, non-residential customers to choose an alternative electric supplier to replace the supplier provided by the utility. PG&E is only responsible for meeting renewable energy goals for its bundled customers.

Table 3.13 4. Projected Peak Power Demand (MW) By Substation

Year	Population	Manteca	Ripon	Jack Tone	Clough (MID)	Stockton (MID)	Total SSJID (MW)
2010	105,319	94.8	27.0	25.6	23.5	1.3	**172.2**
2015	118,579	110.5	31.4	29.8	27.4	1.5	**200.6**
2020	133,508	128.8	36.7	34.7	31.9	1.8	**233.9**
2025	150,316	150.6	42.7	40.5	37.2	2.1	**273.1**
2030	169,241	175.1	49.8	47.2	43.3	2.4	**317.8**
2035	190,122	204.1	58.1	55.0	50.5	2.8	**370.5**
2040	214,539	238.0	67.7	64.2	58.9	3.3	**432.1**

Source: Sphere Plan/MSR, Table 4-6 (2011).

Baseline Reliance on Fossil Fuels

Electricity delivered to the SSJID territory is generated by a mix of fossil, nuclear, and renewable sources, and transportation fuels and natural gas are nearly completely derived from fossil fuels. Users of electricity and transportation fuels have few options for managing or controlling their reliance on fossil fuels, generally limited to improving energy efficiency or in some cases self generating electricity from renewable resources. The fuel mix of the PG&E electricity supply is more particularly described in Section 3.12, Greenhouse Gas Emissions.

Baseline Reliance on Renewable Energy Sources

The fuel mix of the PG&E electricity supply is described in Section 3.12, Greenhouse Gas Emissions. As noted in Section 3.12, PG&E has a requirement to achieve a 20% renewable portfolio standard (RPS) by 2010 under Public Utilities Code (PUC) Section 25740, but it only received 14.1% from "qualifying renewable" resources in 2009 and about 18% in 2010 (PG&E, 2010b; CPUC, 2010a; PG&E, 2011). One third of the renewable energy is from various biomass resources.[3] PG&E receives around 13% of its electricity from large hydropower (larger than 30 MW), which cannot be counted towards the RPS by PG&E. PG&E projects meeting its 20% RPS target some time in 2011; the actual date is held as confidential (PG&E, 2011).

SSJID generates about 320,000 MWh of electricity annually for the wholesale market through its hydroelectric facilities. SSJID owns portions of hydroelectric facilities at the three dams (Tulloch, Beardsley, and Donnells) and power projects comprising the Tri Dam Project, at the Sand Bar facility owned by the Tri Dam Power Authority, and at Woodward Reservoir. SSJID also owns and generates about 3,000 MWh annually at the Robert O. Schulz Solar Farm to supply power to the Nick C. DeGroot Water Treatment Plant. Hydroelectric power generated by the Tri Dam Project is currently sold by SSJID into the Northern California power markets through a contract with Shell Energy North America. SSJID's ownership of generation includes 8 MW of "qualifying renewable" small hydro electric assets (Woodward Reservoir), and a 50 percent ownership in another 120 MW of non carbon hydroelectric generation, of which 48 MW is "qualifying renewable" power (portions of the Tri Dam Project and the Sand Bar facility). The power from the Woodward and Sand Bar facilities is currently (2011) sold exclusively to PG&E. Table 3.13 5 summarizes the renewable generation capacity owned by SSJID.

[3] To qualify as eligible for California's RPS, a generation facility must use a designated renewable resource or fuel, as in the Overall Renewable Energy Program Guidebook (CEC Publication # CEC 300 2007 003 ED2 CMF, adopted December 19, 2007).

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Table 3.13 5.* SSJID Electricity Generation *

Generation Facility	Generation Capacity (MW)	Average Annual Energy Generation (MWh)	SSJID Ownership of Average Annual Generation (MWh)
Tri-Dam Project	102	486,000	234,000
Sand Bar Project	18	114,000	57,000
Woodward Reservoir	8	20,000	20,000
Robert O. Schulz Solar Farm	1.4	3,000	3,000
Total Generation	**129.4**	**623,000**	**323,000**

Source: Sphere Plan/MSR, Table 4-4 (2011).

Baseline Customer Energy Management Programs *

California has mandated and implemented aggressive energy use reduction programs for electricity and * other resources. The CPUC and CEC plan and oversee these programs. The California Long Term Energy * Efficiency Strategic Plan reflects the goals set for PG&E, and the CPUC has issued a series of decisions * and resolutions to implement the Plan. *

Demand Response Programs *

PG&E currently offers programs for customers to reduce their peak and base period demands for elec * * tricity. PG&E's demand response programs encourage commercial and industrial customers to partici * * pate both through tariffed rates (*e.g.*, Schedule E BIP – Base Interruptible Program) and through directly * managed load interruption programs. In addition, PG&E runs an air conditioning cycling program for res * * idential and small commercial customers. Also, PG&E is implementing peak day pricing (PDP) to encour * * age reduced demand from all customers on the dozen days per year with the highest expected total sys * * tem load. Finally, PG&E allows third party aggregators to pool customers so that those customers can * qualify for certain incentives from PG&E. A detailed overview of the baseline programs currently available * to PG&E's customers is in Appendix F of this EIR (see Appendix F 1, "PG&E's Demand Response Programs). *

Energy Efficiency and Conservation Programs *

PG&E currently manages a wide array of energy efficiency programs that customers within the SSJID ser * * vice territory can access (see Appendix F of this EIR). The programs can be separated by targeted cus * * tomer groups or applications. The CPUC in Decision 09 09 047 adopted a budget of $1.928 billion for * PG&E to spend over three years, 2009 to 2011. Of that, $417 million is allocated to low income Energy * Efficiency. A detailed overview of the baseline programs currently available to PG&E's customers is in * Appendix F of this EIR (see Appendix F 2, "PG&E Energy Efficiency and Demand Response Programs). *

PG&E also implemented a tariffed program (AG ICE) to convert diesel agricultural pump engines to elec * * tricity over a two year period beginning in 2007, ending in 2008. While the program converted over * 1,700 engines across PG&E's service territory (Geis, 2010), the CPUC adopted a cap of 100 engines within * SSJID's boundaries out of a population of 420 eligible engines county wide (in CPUC Decision 05 06 016 * at Conclusion of Law 11). *

SSJID's Existing Energy Management Programs *

SSJID's past and existing efforts for fostering use of renewable resources and increasing energy efficiency * occur in conjunction with PG&E's programs. Additionally, SSJID implements water conservation pro * *

*

grams that promote physical improvements for customers, water measurement, and irrigation manage * * ment practices, which enhance the control and efficient use of surface water (SSJID, 2011). Efficient dis * * tribution of surface water to agricultural customers improves the availability of water for other uses, * reducing the need for energy intensive water transfers or groundwater pumping. *

SSJID's past and existing energy management efforts include (p. 1-15 of SSJID, 2009a): *

* SSJID contracted with Lathrop Irrigation District ("LID") to assist in the establishment of a retail elec * * tric distribution enterprise for the River Islands development. Under the terms of a Mutual Aid Agree * * ment, SSJID will assist in services that LID would need in order to assume "utility responsibility" for * the provision of electric service in the LID service area. LID received authorization from the LAFCo to * offer retail electric service in January 2005. *
* SSJID developed a demand response program within the City of Manteca in cooperation with BPL * Global, Ltd. Known as Easy Green, this program offers customers the opportunity to reduce their peak * electric usage. The program installed controls in the homes of more than 1,650 customers and has the * potential to reduce peak electrical usage during periods of demand by as much as 2 MW. *
* SSJID installed a 1.4 MW solar generation facility to offset demand at its Water Treatment Plant. *
* SSJID is expanding the electric generation capacity at its Tulloch Hydroelectric Project, in cooperation * with Oakdale Irrigation District. The addition of a third generation unit will add an additional 7.5 MW * of qualifying renewable capacity. *

Comparison of SSJID's Proposed Public Purpose Programs with PG&E's Baseline Programs *

The proposed retail electric service plan includes SSJID allocating funds from its retail electric revenues * to implement energy management programs that would be comparable to those offered by other pub * * licly owned utilities in the area. SSJID has not yet proposed specific measures, including measures for * industrial and agricultural customers, linkages to state run programs such as codes and standards, or * measures to stimulate technology innovation and diffusion. Therefore, at this time, a direct comparison * of proposed SSJID and current PG&E programs cannot be made. *

SSJID would be required to provide Public Purpose Programs funded through a public goods charge to * reduce energy usage (improve efficiency), promote clean energy, and provide low income assistance. * SSJID proposes to focus the programs on local customers' preferences. The specific programs would * need to be adopted in future actions by the SSJID Board of Directors following a review of the appropriate * * ness, cost effectiveness, and other implications of the options. Based on a review of program offerings from * other nearby publicly owned electric utilities, SSJID anticipates offering the types of programs shown in * Table 3.13-6 based on the Project Description, in Section 2, Table 2-7 of this EIR (SSJID, 2009a). *

Table 3.13-6. SSJID's Proposed Public Purpose Programs *

Customer Class	Anticipated Types of Programs
Residential	* Energy Audits * Rebates for installation of energy efficiency measures and solar * Refrigerator recycling program * CFL (compact fluorescent light bulb) rebate * New Construction Rebate * Energy Savings Kits for school children * Education Specialist for outreach to schools and community groups

Customer Class	Anticipated Types of Programs
Low Income / Customer Discounts	* Weatherization: for low-income qualified customers * Levelized bill payment plans – allows a customer to pay the same amount each month * Rate Discount
Commercial	* Meter Manager * Online Energy Management Tool * Custom Rebates and technical support for investment in energy efficiency equipment * Refrigeration and lighting Rebates * Regional partnership with cities, housing agencies and other entities with an interest in building efficiency and clean energy generation.

Source: SSJID, 2009a (p. 6-3).

Baseline Electricity Rates

All other factors held equal, higher electricity rates will lead to lower consumption per customer. However, there is no widespread agreement on the magnitude nor timing of these responses. Customers are least responsive in the near term because they have fewer options for changing their energy consumption. However, over time, customers can choose more energy efficient appliances and other devices.

Each retail electric service provider sets its electricity rates depending on, among other considerations, a given customer's usage, the type (class) of customer, baseline allowances, and seasonal schedules, and these rates change over time as the costs of supplying electricity change. SSJID proposes to reduce the average rate paid by its customers compared to PG&E's current rates (SSJID, 2009a). The magnitude of the rate reduction would be determined at a later date, but providing a 15% reduction would be consistent with the differences between California's investor owned utilities and California's publicly owned utilities. PG&E has the lowest average retail price of California's three major investor owned utilities at 13.62 cents per kWh in 2009; PG&E's average price is greater than the average retail price of California's publicly owned utilities at 11.69 cents per kWh in 2009 (US EIA, 2011). PG&E's average price is also greater than that of MID at 11.87 cents per kWh in 2009 (US EIA, 2011).

Table 3.13-7 shows the average electricity prices and typical monthly bills for residential customers served by the two existing retail electric utilities in the SSJID territory. Over the year, residential customers in San Joaquin County consume an average of between 650 to 700 kWh per month. Summer use for customers with heavy air conditioning loads is typically at least 20% greater than winter use, but some customers relying on electric baseboard heating may have higher winter use.

Table 3.13-7 Current Electricity Prices and Typical Monthly Bills for Residential Customers

Monthly Residential Usage	PG&E Summer	PG&E Winter	MID Summer	MID Winter
600 kWh	$76	$98	$113	$96
750 kWh	$120	$144	$140	$118
1000 kWh	$198	$229	$185	$156
1500 kWh	$369	$400	$276	$231
Average Retail Price (all customer classes)	$0.1362 per kWh		$0.1187 per kWh	

Source: PG&E Rate Schedule E-1, effective June 20, 2011; MID Rate Schedule D, effective January 1, 2011; US EIA, 2011.
Note: Average retail price is for all customer classes.

3.13.1.2 Applicable Regulations and Policies *

State CEQA Guidelines. On December 31, 2009, the California Natural Resources Agency adopted certain * amendments to the State CEQA Guidelines to change how public agencies review the environmental * impacts of greenhouse gas emissions (GHG) and energy use. These amendments, which were approved * by the Office of Administrative Law on February 16, 2010, became effective on March 18, 2010, and became * mandatory for most public agencies approximately 120 days later (see CEQA Guidelines, §15007, subd. * (d)(2)). The topic of GHG is addressed in Section 3.12 of this EIR. Section 3.12 also provides a discussion * on the effects of the project on energy resources that provide the electricity supply. *

California Code of Regulations (CCR) Title 24. New buildings in California are required to conform to * energy conservation standards specified in Title 24 of the CCR. The standards establish "energy budgets" * for different types of residential and non residential buildings, with which all new buildings must com * * ply. The State Building Energy Efficiency Standards, embodied in Title 24 of the CCR regulate energy con * * sumed for heating, cooling, ventilation, water heating, and lighting. Local building permits and approval * processes require all new buildings to meet Title 24 standards. *

California Renewable Portfolio Standard (RPS). In 2002, California established its RPS through Senate * Bill 1038 (Sher, 2002), with the goal of increasing the percentage of renewable energy procured by investor * * owned utilities such as PG&E in the State's electricity mix to 20% by 2017. That was accelerated to 2010 * in 2006 by SB 107 (Simitian and Perata, 2006); however, no utility has yet achieved that goal. State * energy agencies recommended extending that goal, and in November 2008, the Governor signed Exec * * utive Order S 14 08 requiring that California utilities reach the 33% renewable electricity goal by 2020. * The AB32 Scoping Plan (CARB, 2008) includes the 33% RPS by 2020. In April 2011, the statewide 33% RPS * target became law with Senate Bill 2 of the 1st Extraordinary Session (SB X1 2). This extends the 33% RPS * requirement to all electric service providers, including municipal utilities. The recently adopted RPS would * become binding on SSJID in largely the same manner as for PG&E, with differences allowed for determining * which renewable resources are deemed "qualified." *

SSJID is committed to achieving the RPS targets established by SB X1 2 (Pub. Util. Code, §399.30). SSJID * proposes to comply with RPS requirements through wholesale power supply contracts with generators * in the deregulated marketplace. SSJID could also comply with the standard through the purchase of * Renewable Energy Credits (RECs), although the statewide 33% RPS law limits the use of RECs, or through * the use of SSJID owned hydroelectric generation, depending on its availability and economic circum * * stances although using the SSJID owned hydroelectric power is not part of the proposed business plan. * SSJID would be required annually submit to the CEC documentation regarding eligible renewable energy * resources procurement contracts that it executed during the prior year as part of the RPS law and the * statewide Power Source Disclosure program (SB 1305 of 1997). *

Public Purpose Requirements (AB 1890). With the passage of Assembly Bill 1890 (Brulte, 1996), both * investor owned utilities such as PG&E, and publicly owned electric utilities, as SSJID would be, are required * to collect and spend a specific amount of its revenues on alternative and renewable generation resources, * energy management programs such as energy efficiency and demand response, and low income support * programs. PG&E's overall requirements are dictated by Public Utilities Code Sections 381 and 399.8, * with more specific elements listed elsewhere in state law, with the funds collected through a nonbypass * * able public goods charge. The total amount to be collected and spent each year by PG&E is specified in * those sections. That charge is set to expire January 1, 2012. The CPUC directs these programs with numer * * ous decisions and resolutions. *

*

AB 1890 set a minimum expenditure target for publicly owned utilities such as SSJID as well in PUC Sec * * tion 385(a): *

> *Each local publicly owned electric utility shall establish a nonbypassable, usage based * charge on local distribution service of not less than the lowest expenditure level of the * three largest electrical corporations in California on a percent of revenue basis, calcu * * lated from each utility's total revenue requirement for the year ended December 31, 1994, * and each utility's total annual expenditure under paragraphs (1), (2), and (3) of subdivision * (c) of Section 381 and Section 382, to fund investments by the utility and other parties in * any or all of the following: *
>
> (1) *Cost effective demand side management services to promote energy efficiency and * energy conservation. *
>
> (2) *New investment in renewable energy resources and technologies consistent with exist * * ing statutes and regulations which promote those resources and technologies. *
>
> (3) *Research, development and demonstration programs for the public interest to advance * science or technology which is not adequately provided by competitive and regulated * markets. *
>
> (4) *Services provided for low income electricity customer, including but not limited to, * targeted energy efficiency service and rate discounts. *

The California Municipal Utilities Association reports that this minimum level is 2.85% using the 1994 * data (CAT, 2005). *

SSJID would provide, as part of its proposed plan for retail electric service, a service planning group to * ensure that the customer's new business and energy efficiency needs are met and to meet SSJID's legal * requirement to provide "public goods" (as required by AB 1890, SSJID, 2009a). However, SSJID may ini * * tially work with MID to administer the Public Benefits Program to ensure implementation of important * efficiency and renewable investments consistent with those of MID. SSJID's proposed Public Purpose * Programs are identified in the Project Description (see Section 2, Table 2-7)**and Table 3.13-6.**

Public Purpose Requirements (SB 1037). Senate Bill 1037 (Kehoe, 2005) imposed additional resource * planning requirements on both investor owned and publicly owned utilities. PUC Section 454(a)(9)(C) * states that PG&E "will first meet its unmet resource needs through all available energy efficiency and * demand reduction resources that are cost effective, reliable, and feasible." The CPUC enforces this mea * * sure in approving PG&E's Long Term Procurement Plans (LTPP). *

SSJID would be similarly required to meet statewide efficiency goals. PUC Section 9615, enacted in * 2005 by SB 1037, and amended by AB 2021 in 2006, has the following requirements: *

> *(a) Each local publicly owned electric utility, in procuring energy to serve the load of its retail end * * use customers, shall first acquire all available energy efficiency and demand reduction resources * that are cost effective, reliable, and feasible. *
>
> *(b) On or before June 1, 2007, and by June 1 of every third year thereafter, each local publicly * owned electric utility shall identify all potentially achievable cost effective electricity efficiency * savings and shall establish annual targets for energy efficiency savings and demand reduction for * the next 10 year period. A local publicly owned electric utility's determination of potentially * achievable cost effective electricity efficiency savings shall be made without regard to previous *

*

*

*minimum investments undertaken pursuant to Section 385. A local publicly owned electric utility * shall treat investments made to achieve energy efficiency savings and demand reduction * targets as procurement investments. *

*(c) *Within 60 days of adopting annual targets pursuant to subdivision (b), each local publicly owned * electric utility shall report those targets to the State Energy Resources Conservation and Devel * * opment Commission, and the basis for establishing those targets. *

*(d *Each local publicly owned electric utility shall report annually to its customers and to the * State Energy Resources Conservation and Development Commission. The report shall contain, * but is not limited to, both of the following: *

*(1) Its investments in energy efficiency and demand reduction programs. *

*(2) A description of programs, expenditures, cost effectiveness, and expected and actual * energy efficiency savings and demand reduction results. *

*(e) *Each local publicly owned electric utility shall also annually develop and submit to the State Energy * Resources Conservation and Development Commission a report containing all of the following: *

*(1) The sources of funding for its investments in energy efficiency and demand reduction pro * * gram investments. *

*(2) The methodologies and input assumptions used to determine cost effectiveness. *

*(3) The results of an independent evaluation that measures and verifies the energy efficiency savings * and reduction in energy demand achieved by its energy efficiency and demand reduction programs. *

These reporting requirements are similar to the CPUC's Evaluation, Measurement and Verification (EM&V) * process for PG&E's programs. *

Public Utilities Code Section 385 requires a minimum expenditure of 2.85% of revenues on public pur * * pose programs, as discussed above, and Section 9615 supersedes this requirement and changes the focus * to project energy savings. Public Resources Code 25310 imposes a similar requirement on PG&E. As with * all other ratemaking and investment actions by any public utility, authority over this provision is trans * * ferred from the CPUC to the public utility's governing board. Under the proposed project, SSJID would * be required to report on the expenditures on and performance of its energy efficiency programs to the * California Energy Commission under SB 1037. *

The proposed retail electric service plan includes SSJID implementing various energy management pro * * grams (see the Public Purpose Programs in Table 2 7 of this EIR and Table 3.13 6;*SSJID, 2009a). How * * ever, the specific programs would need to be adopted in future actions by the SSJID Board of Directors * following a review of the cost effectiveness of the options. *

3.13.2 Environmental Impacts and Mitigation Measures *

3.13.2.1 Significance Criteria *

CEQA requires that EIRs include a discussion of the potential energy impacts of proposed projects where * there is a possibility of "wasteful, inefficient, and unnecessary consumption of energy." (See Public * Resources Code Section 21100(b)(3).) Appendix F of the State CEQA Guidelines specifically requires con * * sideration of any potentially significant energy implications of a project in an EIR and directs lead * agencies to adhere to the goal of conserving energy, through the following means: *

*

* decreasing overall per capita energy consumption, *
* decreasing reliance on fossil fuels such as coal, natural gas and oil, and *
* increasing reliance on renewable energy sources. *

For this analysis, impacts would be considered potentially significant if the proposed Project would cause * inefficient, wasteful, and unnecessary consumption of energy. This analysis addresses the following potential * energy related impacts outlined in CEQA Appendix F: *

* Would the project result in substantial new energy requirements or significant energy use inefficiencies * for any stage of construction, operation and/or maintenance? *
* Would the project cause a significant adverse effect on local and regional energy supplies and on require * * ments for additional capacity? *
* Would the project cause a significant adverse effect on peak and base period demands for electricity * and other forms of energy? *
* Would the project disrupt compliance with existing energy standards? *
* Would the project cause a significant adverse effect on energy resources? *
* Would the project result in significant adverse effects related to transportation energy use? *

3.13.2.3 Impacts and Mitigation *

The following section analyzes the impacts to energy resources of the four separate actions: *

* Sphere Plan and Municipal Services Review, *
* Proposed Expanded Sphere of Influence, *
* Proposed 80 acre annexation, and *
* Updated Plan to Provide Retail Electric Service. *

Sphere Plan and Municipal Services Review *

Adoption of the Sphere Plan and MSR would not in itself influence per capita energy consumption within * the SOI or cause a change in the reliance on fossil fuels or renewable resources by SSJID or its customers. * The infrastructure improvements likely to be necessary to provide an adequate level of service within * the SOI are described in Section 2.3.1, and the MSR provides determinations as to the ability of SSJID to * provide adequate public services. However, infrastructure improvements that have been previously * approved or planned are not part of the proposed project, and the existing services provided by SSJID as * described in the Sphere Plan and MSR are part of the baseline and environmental setting. No construc * * tion activities are proposed for approval with the potential adoption of the Sphere Plan and MSR. *

Providing retail electric service would be a separate action from adoption of the MSR; as such, the poten * * tial effects are described separately below. If the MSR is adopted without implementing the plan for * retail electric service, PG&E and MID would continue to provide electricity and continue to sponsor their * existing public purpose programs for reducing per capita electricity use. With retail electric service pro * * vided by PG&E and MID in the future, existing trends on power purchases and existing efforts to comply * with the RPS would continue unchanged. *

Adoption of the MSR would not affect the existing energy supplies within the SOI nor would it change * how energy is used or how energy delivery infrastructure is built or used (including petroleum or gas pipe * *

*

lines and electricity transmission or distribution facilities). Similarly, as in the baseline conditions, SSJID * would continue to use transportation fuels for mobilizing crews and equipment. The Sphere Plan and MSR * would not change SSJID's practices of transportation fuel use for infrastructure improvements or for * providing public services. *

Adopting the Sphere Plan and MSR would not cause inefficient, wasteful, or unnecessary consumption * of energy and, it would not have any effect on the energy conservation goal delineated in the State * CEQA Guidelines. Therefore, the Sphere Plan and MSR would not impact energy conservation. *

Proposed Sphere of Influence *

The expanded sphere of influence (SOI) would make the SOI boundaries consistent with the Manteca * city limits. This proposed expanded SOI requires no construction or operation activities, and no change in * retail electric service. Because there would be no energy consuming activities or electricity service modifi * * cations related to the SOI expansion, this would not influence per capita energy consumption within the * SOI or cause a change in the reliance on energy resources by SSJID or its customers. Adopting the * expanded SOI would not cause inefficient, wasteful, or unnecessary consumption of energy. *

Proposed 80 Acre Annexation *

The proposed 80 acre annexation would involve minor construction activity to install a sprinkler sump * from the existing SSJID irrigation facilities. This construction would require some energy consumption. How * * ever, it would be limited in nature, and it would rely exclusively on existing energy resources. Delivering * irrigation water to the proposed annexation through existing SSJID facilities would reduce the energy * use of the landowner by providing a surface water supply alternative to groundwater pumping, which is * more energy intensive than surface delivery. Because there would be no notable change in energy * * consuming activities and no change in electricity service providers related to the annexation, this would * not influence per capita energy consumption within the SOI or cause a change in the reliance on energy * resources *by *SSJID *or *its *customers. *Annexing *the *80 acre *property *would *not *cause *inefficient, * wasteful, or unnecessary consumption of energy. This annexation has been proposed as a separate * action wholly independent of and for distinctly different reasons than SSJID's proposed plan to provide * retail electric services, and it is not dependent in any way upon SSJID's separate proposal to provide * such electric services. *

Updated Plan to Provide Retail Electric Service *

Approval of the plan to provide retail electric service would allow SSJID to replace PG&E in making power * purchasing decisions and implementing programs that may influence the per capita energy consumption * by SSJID customers. The following analysis discusses whether the retail electric plan could have an effect * on the energy conservation goals delineated in the State CEQA Guidelines. *

Public Utilities Code Section 399.8(b) requires investor owned utilities to devote a specific amount of * retail revenues to their respective Public Purpose Programs, such that * (t)his rate component may not * exceed, for any tariff schedule, the level of the rate component that was used to recover funds authorized * pursuant to Section 381 on January 1, 2000." PG&E is required to spend at least $368 million on renew * * ables, energy efficiency and research. Low income assistance is an additional element that is dictated by * other formulas in state law. However, PG&E's current spending on Public Purpose Programs is greater * than what is legally required. Reporting required by PUC Section 747 indicates that $592 million, or 4.7% * of PG&E retail revenues in 2010, went to energy efficiency and renewable energy programs, including *

Low Income Energy Efficiency, Affordable Solar Housing, and administration of PG&E's rate discount for low income customers (California Alternate Rates for Energy or CARE) (CPUC, 2011). This amount represents a benchmark for energy efficiency expenditures by the current serving utility. Another 3.4% goes to PG&E's rate discount for low income customers in the CARE program. In total, PG&E is projected to collect $939 million or 8.1% of current retail revenues (PG&E, 2010a) for Public Purpose Program funds and CARE subsidies.

SSJID considers Public Purpose Programs to be third in the hierarchy of what is important to customers, after service reliability and service costs. Reducing electric rates is a key objective of SSJID (Section 2.2 of this Subsequent EIR), and rate reductions would provide a direct public benefit to all SSJID's customers. In addition to lower rates, SSJID's plan to provide retail electric service would allocate 4% of gross revenues to energy efficiency Public Purpose Programs. This would exceed the minimum of 2.85% required under state law for publicly owned utilities. SSJID's level of spending would be comparable to PG&E's average spending across its entire territory on energy efficiency and renewable energy programs (4.7% of PG&E retail revenues).

SSJID's proposal to reduce rates for all customers would provide the greatest benefits to lower income customers. SSJID does not explicitly propose matching PG&E's funding of its CARE rate discount (3.4% of PG&E retail revenues). However, SSJID proposes to implement a comparable low income rate discount (see Table 3.13 6); and SSJID's overall rate design proposes to reduce customer rates across all classes, which would provide assistance to low income customers similar to that provided by PG&E's existing CARE discount. Comparing the benefits would require a complex analysis of CARE customers within SSJID's boundaries, taking into account customers' income, household size, and energy usage, most of which data is confidential and held by PG&E. Thus, a full direct comparison of PG&E's and SSJID's proposed public purpose program spending is not possible. SSJID's proposal for Public Purpose Programs is shown in the Project Description and in Table 3.13 6.

SSJID has no immediate plans to annex areas within Area "D" or Area "E" (Figure 2 2 in the Project Description) or to provide retail electric service in these areas. These areas are outside the current SSJID territory, but inside its current and proposed SOI. However, if the current proposal for retail electric service is approved and if the areas are annexed in the future, SSJID would likely expand this service to Area "E" within 10 years and to Area "D" within 30 years. Foreseeable future impacts from this possible expansion of SSJID's retail electric service are addressed generally as programmatic impacts. Specific proposals for annexations or service beyond SSJID's existing territory may need to undergo the project level environmental review process and other required approvals should SSJID decide to pursue such an annexation or service expansion in the future.

Impact 3.13 1: Result in substantial new energy requirements or energy use inefficiencies

Changes in the overall per capita energy consumption associated with the proposed plan to provide retail electric service would stem directly from the proposed changes in energy efficiency, and energy conservation programs resulting from the replacement of PG&E as the primary electric service provider in the SSJID territory. This discussion focuses on the proposed changes of replacing PG&E, because existing MID customers in the SSJID territory would experience no change in program offerings from MID.

Energy Efficiency and Conservation

Energy efficiency programs generally aim to assist homeowners and business owners in providing more energy efficient work and living spaces and more energy efficient electrical equipment. PG&E has active

energy efficiency programs guided by CEC and CPUC oversight (see Appendix F 2, "PG&E Energy Effi * * ciency and Demand Response Programs). *

SSJID would offer Public Purpose Programs for residential and commercial customers that would be similar * to those established by PG&E. SSJID also proposes to emphasize and focus on providing local govern * * ments with cooperative opportunities to improve energy efficiency (p. 6 3, "SSJID, 2009a). *

No detail is available on the potential effectiveness of SSJID's proposed Public Purpose Programs in reduc * * ing per capita energy use. Each service territory and program is unique, so extrapolating from other utilities' * programs would be speculative. SSJID expects that its public benefit program costs will represent approxi * * mately 4% of its retail revenues. *

It is difficult to compare PG&E's energy efficiency programs with those proposed by SSJID. As discussed previ * * ously, data on the effectiveness of PG&E's programs is public (CPUC dockets for Order Instituting Rule * * making 06 04 010 and Application 08 07 021), but public data is not available at a detailed enough level * to discern the baseline success of the programs for customers in the SSJID territory. Systemwide aver * * ages may not be indicative of program effectiveness at the local level because of diversity of customer * types across PG&E's service area. Without more specifics about the nature of and participation rates in * PG&E's programs in the SSJID territory, it would be speculative to draw conclusions as to whether energy * efficiency programs of the proposed retail electric service plan would result in changes in energy conser * * vation and per capita energy consumption. *

***Energy Conservation** **

SSJID expects to provide electric service at customer rates that will be lower than PG&E's rates. Overall, * customers served by SSJID may consume more electricity under the proposed electric plan because of * SSJID's lower rates. Absent final rate forecasts for the SSJID customers, this analysis does not quantify * whether the change in retail electric service provider would cause customers to consume more elec * * tricity because of lower rates. Without knowing the specifics of the amount and the timing of the rate * reductions *and *how *the *rate *design *for *specific *customers *will *differ *from *PG&E's *current *and * prospective rate designs, it is speculative to estimate the magnitude of any change. The state has not * established any other standards for what constitutes "inefficient" use beyond specific demand response * and energy efficiency targets. See Section 3.13.1.2 for Applicable Regulations and Policies. *

Publicly owned utility energy efficiency programs tend to be cost effective and provide high benefits per * cost. According to the most recent SB 1037 Report on publicly owned utility energy efficiency programs, * the average total resource cost (TRC) ratio for benefits compared to costs was 3.15 for the 2009 10 fiscal * year (CMUA, 2011). The largest fifteen publicly owned utilities averaged a TRC of 3.8 in 2009 (CEC, * 2010c). SSJID proposes to base its programs on other successful publicly owned utility programs such as * at MID and SMUD (SSJID, 2009a, p. 6 2). The ratios for MID's and SMUD's programs vary from year to** * year, and for 2008 were 2.71 and 1.93, respectively. Comparing these cost effectiveness metrics to PG&E's * data would be misleading due to differences in key assumptions (CEC, 2010c). For informational pur * * poses, PG&E's TRC for its programs in 2009 was 1.62 (PG&E, 2010c) and 1.28 for its 2006 2008 programs * (CPUC, 2010b). Based on this data, SSJID might expect to achieve similar or greater energy savings per * dollar expended compared to PG&E. Due to the complexity of the relationships between utility pro * * grams and demand, the lack of detail available about energy efficiency and demand response programs * (identified under Impact 3.13 1); and the limited effect the utility may have on demand, it would be * speculative to conclude that the proposed retail electric service plan would result in less energy conservation * or increased per capita energy consumption. *

*

Without a full energy efficiency program plan and determining its relationship to future demand, it would be speculative to assess how SSJID will comply with the AB 2021 energy efficiency goals. Developing a plan to comply with the AB 2021 goals is specifically required under state law.

Conclusion on Significance of Energy Use Inefficiencies

The SSJID retail electric service plan would include changes in energy efficiency and conservation programs, but forecasting the effectiveness of the programs is difficult due to their preliminary natures. Likewise, data on the effectiveness of PG&E's programs is public but not available at a detailed enough level to analyze potential impacts within the customer base in the SSJID territory.[4] The local characteristics are not comparable because of the diversity of customer characteristics within PG&E's service territory and geographic clustering of certain types of customers such as the agricultural and heavy air conditioning loads. Consumption may increase or remain unchanged with the change in providers and resulting changes in rates, while energy use reduction measures may be more or less effective than those currently managed by PG&E. Note that SSJID would be required to ensure access to feasible energy efficiency and conservation measures through its proposed Public Purpose Programs (in Table 2 7 of this EIR and Table 3.13 6; SSJID, 2009a) and to comply with state level public purpose requirements that apply to all publicly owned utilities. Implementing the proposed programs in compliance with state law would avoid inefficient, wasteful, or unnecessary consumption of energy.

The impacts of the possible future expansion of SSJID's retail electric service to Area "D" or Area "E" (Figure 2 2 in Chapter 2, Project Description) would be similar to these impacts described for the proposed project; however, there are no plans for this possible expansion currently under consideration.

Impact 3.13 2: Cause an adverse effect on local and regional energy supplies and requirements for additional capacity because of inefficient, wasteful, or unnecessary energy use

The proposed plan to provide retail electric service would expand the capacity of the existing electric distribution system, as needed to ensure that the distribution substations can reliably accommodate load within the SSJID territory and in areas served by proposed SSJID facilities outside the SSJID territory. Modifications to distribution substations and circuits presently owned by PG&E and MID would be necessary to separate the system and to provide the capacity to SSJID's customers. No other energy delivery systems would be affected. SSJID proposes no new power plants or electric generating facilities. By changing the owner and operator of the local electric distribution facilities, the retail electric service plan would not change any other energy delivery infrastructure (such as petroleum or gas pipelines or electricity transmission facilities).

The Project Description (see Table 2 1, Section 2) describes the existing PG&E and MID transmission and distribution facilities for areas within the District. With the proposed retail electric service plan, power would continue to be delivered to substations within SSJID's territory over the existing transmission lines owned by PG&E and MID. To assure coordinated transmission system planning and compliance, SSJID intends to participate in the Western Electricity Coordinating Council (WECC) and North American Electric Reliability Council (NERC).

[4] To analyze the current effectiveness of PG&E's programs within SSJID's proposed service area prior to establishing the new utility would require that SSJID be able to access PG&E's customer data. This in turn would require gaining permission to see confidential customer data from each individual customer. This legal requirement makes such analysis infeasible and impractical.

San Joaquin LAFCo requested an opinion from the CPUC on the effect of SSJID's proposal to provide retail * electric service within PG&E's service territory. The CPUC issued Resolution E 4301 on December 17, 2009, * and the CPUC opinion provides a finding that SSJID's proposed service could raise rates for PG&E's * remaining ratepayers but the magnitude of the estimated increase is small relative to PG&E's current * system average rates, and thus does not substantially impair PG&E's ability to provide adequate service * at reasonable rates. *

Local and regional energy supplies would not be directly affected. PG&E and MID currently ensure ade * * quate electricity supplies for customers in the SSJID territory. By entering into retail electric service, SSJID * would alleviate the need for PG&E to acquire power for the departing customers; SSJID would assume * that responsibility. SSJID would take steps to plan and expand the capacity of the distribution system as * needed to respond to load growth. The overall availability of local and regional energy supplies would * not change. The proposed retail electric service plan would not cause inefficient, wasteful, or unneces * * sary energy use that could have adverse effects on local and regional energy supplies or requirements * for additional capacity. *

The impacts of the possible future expansion of SSJID's retail electric service to Area "D" or Area "E" * (Figure 2 2 in Chapter 2, Project Description) would be similar to these impacts described for the pro * * posed project; however, there are no plans for this possible expansion currently under consideration. *

Impact 3.13 3: Cause an adverse effect on peak and base period demands for electricity and * other forms of energy because of inefficient, wasteful, or unnecessary energy use *

Peak load periods in the SSJID territory coincide with high temperatures in the San Joaquin Valley and * subsequent air conditioner usage. The San Joaquin Valley load substantially contributes to the summer * peak demand for electricity relative to PG&E's system average. This means that with the proposed elec * * tric plan, the need for PG&E to provide future generation capacity for summer peak loads would be * reduced in areas served by facilities acquired by SSJID. SSJID would assume this responsibility for serving * the peak demand in its territory. *

The peak and base period energy demand can be influenced by: retail rate levels and design (*i.e.*, usage * demand and energy charges, customer connection charges), inclusion of low income rate assistance, * energy efficiency and demand response program implementation and participation, and changes in socio * * economic patterns. SSJID has experience in helping electric customers in the SSJID territory to reduce * their peak electric usage by installing controls in Manteca residences through the Easy Green program. * This kind of demand response program could be used by SSJID along with rate design to influence peak * period demand. However, demand would remain primarily driven by the climate and customer base. *

Demand Response Programs *

Demand response consists of an electric service provider's capability to reduce energy usage of customers * to provide electric load relief in the event of energy shortages or local or regional system emergencies. * PG&E has a long history of providing demand response programs designed to curtail energy use. PG&E * relies on its tariffed rates to encourage commercial and industrial customers to participate in inter * * ruptible load programs. Examples of existing demand response are the Schedule E BIP ± Base Interruptible * Program and residential air conditioner cycling (see Appendix F 1, "PG&E's Demand Response Programs). *

Prior to applying for approval of the updated retail electric plan, SSJID developed a demand response * program within the City of Manteca known as Easy Green. SSJID reports that this program can reduce *

peak electrical usage during periods of demand from existing Easy Green customers by as much as 2 MW (p. 1-15 of SSJID, 2009a), or 1% of the existing peak demand in SSJID territory.

The agriculture and commercial sectors are also areas of potential demand response program improvements. SSJID has experience in improving its groundwater pumping capabilities by using electronic controllers to operate the pumps on energy efficient cycles (MSR Chapter 4, 2011), and SSJID implements water conservation programs that promote physical improvements for customers, water measurement, and irrigation management practices, all of which enhance the control and efficient use of surface water (SSJID, 2011). SSJID proposes to focus specifically on local customers to establish agreements and voluntary programs allowing SSJID to order electrical load curtailment of larger agricultural or commercial customers (SSJID, 2009a). SSJID's total load curtailment capability is forecast by SSJID to be 4 MW. This represents the capability of reducing the peak load by approximately 2.5%.

It is difficult to compare PG&E's demand response programs with those proposed by SSJID. Systemwide averages for PG&E are not appropriate due to the wide diversity of climate and customer characteristics in PG&E's service territory. To assume averages for PG&E are representative of the SSJID territory would be speculative. For example, the proportion of residential customers with air conditioning and the amount of agricultural load and groundwater pumping differ dramatically in the SSJID territory versus PG&E's territory covering most of Northern California. Certain data on the effectiveness of PG&E's programs is public (CPUC dockets for Order Instituting Rulemaking 06-04-010 and Application 08-07-021), but public data is not available at a sufficiently detailed level to discern the baseline success of the programs for customers in the SSJID territory. Likewise, accurately forecasting the effectiveness of SSJID's proposals is not possible due to their preliminary nature. Without more specifics about the nature of and participation rates in PG&E's interruptible and demand response programs in the SSJID territory, no conclusion can be drawn as to whether demand response programs of the proposed retail electric service plan would result in changes in energy conservation and per capita energy consumption.

Due to the complexity of the relationships between utility programs and demand, the lack of detail available about energy efficiency and demand response programs (identified under Impact 3.13-1), and the limited effect the utility may have on demand, it would be speculative to conclude that the proposed retail electric service plan would result in higher peak loads or changes in the relationship of peak to base period usage. In addition, the proposed electric plan would include programs to manage peak and base period demands so that SSJID's customers could avoid inefficient, wasteful, or unnecessary consumption of energy. Measures related to reducing peak demand include implementing, if feasible, an interruptible load program for agricultural customers and improved rate design and automated metering infrastructure. As a result, notable changes in the demand profile would not be likely. Therefore, the proposed retail electric service plan would not have an adverse effect on peak and base period demands because of inefficient, wasteful, or unnecessary consumption of energy.

The impacts of the possible future expansion of SSJID's retail electric service to Area "D" or Area "E" (Figure 2-2 in Chapter 2, Project Description) would be similar to these impacts described for the proposed project; however, there are no plans for this possible expansion currently under consideration.

Impact 3.13-4: Disrupt compliance with existing energy standards

All aspects of the proposed plan to provide retail electric service would be required to comply with all current energy standards. Although no new land development is proposed aside from the Jack Tone Substation, SSJID would design and build all new structures or facilities to meet current building standards for energy conservation. Several elements of the proposed electric distribution system modifica-

tions would replace older lines, and some modifications would occur to standardize distribution voltages, to improve reliability. No aspect of the retail electric service plan would conflict with current energy standards.

As discussed above, SSJID plans to comply with and exceed standards for spending on energy management programs funded through its public goods charge. SSJID would also be bound by the statewide RPS (SB X1 2) and CEC requirements to report the renewable resources used in the mix of power supplies (Power Source Disclosure program; SB 1305 of 1997). Therefore, the proposed retail electric service plan would not disrupt compliance with existing energy standards.

The impacts of the possible future expansion of SSJID's retail electric service to Area "D" or Area "E" (Figure 2 2 in Chapter 2, Project Description) would be similar to these impacts described for the proposed project; however, there are no plans for this possible expansion currently under consideration.

Impact 3.13 5: Cause an adverse effect on energy resources because of inefficient, wasteful, or unnecessary energy use

Most of the electricity generated or purchased by PG&E comes from hydroelectric, nuclear, and natural gas–fired power plants. SSJID currently owns or is part owner of only hydroelectric or solar generation assets. Because PG&E does not rely upon notable coal or oil fired energy resources, this discussion focuses on renewable and natural gas resources.

SSJID proposes to enter into new agreements for energy resources to supply electricity to its retail customers.[5] New power purchase agreements established by SSJID would likely involve new short and long term power purchase contracts, spot market purchases, transactions for renewable energy attributes, and potentially purchased customer owned generation.

With the change in retail electric service provider, PG&E would no longer need to generate or purchase power for areas served by facilities acquired by SSJID. PG&E must increase its procurement of power from renewable sources to comply with the RPS. SSJID would also make purchases from a mix of energy resources that complies with the RPS. Consequently, there would be no increase and potentially a decrease in reliance on natural gas resources as a result of the SSJID retail electric plan.

PG&E and SSJID would both be subject to the statewide RPS (SB X1 2) to achieve a 33% renewable energy resource delivery rate, compared to the total energy resource mix. PG&E served about 18% of its 2010 load with RPS eligible renewable energy. The RPS codified in 2011 with SB X1 2 ensures that PG&E and SSJID would be held to the same standard to achieve the 33% target at the same time (by December 31, 2020). SSJID would be required to report its resource mix to the CEC annually [Power Source Disclosure program; SB 1305 of 1997; PUC Sections 387 and 398.1 *et seq*.]. Because PG&E and SSJID would both be subject to the RPS, there would be no overall change in reliance on renewable resources as a result of the change in retail electric service provider. The proposed retail electric service plan would not involve inefficient, wasteful, or unnecessary energy use that could have an adverse effect on energy resources.

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[5] Whether SSJID purchases directly from its share of the Tri Dam Project resources or sells that power and purchases from other resources is financially indistinguishable to potential SSJID customers so long as Tri Dam receives the same market based prices as SSJID pays for purchased power. However, preferential access to the Tri Dam resource allows SSJID to cap its financial exposure to purchasing RPS compliant resources in the future if SSJID chooses to contract with Tri Dam if renewable resource market prices rise to unattractive levels.

The impacts of the possible future expansion of SSJID's retail electric service to Area "D" or Area "E" (Figure 2-2 in Chapter 2, Project Description) would be similar to these impacts described for the proposed project; however, there are no plans for this possible expansion currently under consideration.

Impact 3.13-6: Result in inefficient, wasteful, or unnecessary transportation energy use

No aspect of the proposed project would notably affect transportation energy use. As in the baseline conditions with PG&E's operation and maintenance, SSJID would continue to use transportation fuels for mobilizing crews and equipment for operations and maintenance. PG&E operates compressed natural gas (CNG) fueling facilities in Stockton and Merced, and a portion of PG&E's existing natural gas vehicle fleet may occasionally operate in SSJID's territory. The proposed retail electric service plan would reduce the need for PG&E to operate its fleet in the area but not entirely because PG&E would continue to provide natural gas service as it does today. SSJID would primarily use motor gasoline and diesel transportation fuel for providing retail electric services. No notable change in transportation fuel demand would occur with the project because PG&E's existing fleet of CNG-fueled vehicles would continue to operate across the PG&E service areas between Stockton, Merced, and beyond.

The proposed retail electric plan would result in SSJID displacing the existing activity by PG&E in operating and maintaining the electric distribution system, and would result in a change in the particular location of the crews and specific fleet of equipment needed to provide retail electric service. However, it would not change the overall need to use transportation fuels while continuing to provide service. Accordingly, the retail electric service plan would not cause inefficient, wasteful, or unnecessary consumption of energy because there would be no notable changes in how transportation fuels are used.

The impacts of the possible future expansion of SSJID's retail electric service to Area "D" or Area "E" (Figure 2-2 in Chapter 2, Project Description) would be similar to these impacts described for the proposed project; however, there are no plans for this possible expansion currently under consideration.

3.13.3 Conclusion

State law has oversight provisions for implementing renewable resource and energy conservation measures that apply to all utilities including publicly owned electric utilities. With implementation of SSJID's proposed Public Purpose Programs, potential impacts related to energy conservation would be avoided. Therefore, no significant and unavoidable impacts related to energy conservation would occur as a result of the proposed project.

3.13.4 Mitigation Monitoring Program

A mitigation monitoring, compliance, and reporting program would not be needed for Energy Conservation because no significant impacts would occur.

3.13.5 References

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