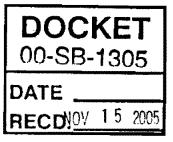
CALIFORNIA ENERGY COMMISSION

RECONCILIATION OF RETAILER CLAIMS, 2004

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COMMISSION REPORT

October, 2005 CEC-300-2005-021



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Introduction

All retail providers are mandated by law (Public Utilities Code, Section 398.5(e) to disclose the source of electricity sold to their customers in California. The law also requires the California Energy Commission (Energy Commission) to prepare an annual report comparing the source of power retailers have disclosed to their consumers the actual energy generated for consumption in California. The activities carried out to meet this mandate are referred to as the "SB 1305 Power Source Disclosure Program."

This report, *Reconciliation of Retailer Claims, 2004* fulfills a part of that mandate for calendar year 2004. After reviewing the available data, the Energy Commission staff concludes that claims made by those retailers who complied with the mandatory reporting requirements are accurate.

Appendix A summarizes statewide participation in the SB 1305 Power Source Disclosure Program. Additionally, Appendix A lists the renewable content from those retail providers making specific claims about their products.

Background

Enacted in 1997, Senate Bill 1305 (Stats. 1997, ch. 796, § 1) requires that retail providers of electricity disclose to consumers "accurate, reliable, and simple to understand information on the sources of energy used to provide electric services." All retail providers of electricity must disclose fuel source information to consumers about the electricity being sold by using a format developed by the Energy Commission. Retail providers who do not make any claims about the power content of their products may claim what the Power Source Disclosure Program refers to as the "California Power Mix" (referred to in the legislation as "Net System Power"). The California Power Mix is established by the California Energy Commission to represent the sources of electricity consumed in state and not disclosed as "specific purchases" by retail service providers.

Retail providers who make claims differentiating their power mix from the California Power Mix ("claims of specific purchases") must substantiate the generation sources of their power to a system operator or the Energy Commission. In addition, these retail providers are required to submit detailed information about their power purchases and retail sales to the Energy Commission annually.

Appendix A lists the retail providers who made claims of specific purchases and the type of information submitted to the Energy Commission for the preceding year. Information required to be submitted by retail providers includes power content labels, annual reports on purchases and sales, and audits that verify the accuracy of the labels and annual reports. Additionally, Appendix A includes the renewable content, if available, of the retail provider's default product.

The law also requires all electricity generators who report meter data to a system operator to also report generation (in kWh), generator technology, and fuel type consumed (as a percentage of generation) on a quarterly basis. System operators must then make the generation and fuel source information available to the Energy Commission for the purpose of verifying information disclosed to consumers and calculating Net System Power (established annually by the Energy Commission). Generators whose power is claimed as a specific purchase and who do not provide this data to a system operator must provide it annually to the Energy Commission.

Using the detailed information from retail providers and generators, the Energy Commission prepares an annual report comparing annual power source information disclosed to consumers with information on actual electricity generated in California.

In line with SB 1305, the Energy Commission has implemented regulations specifying the following:

- 1) Guidelines and formats for disclosure of generation-related information to system operators and the Energy Commission,
- 2) Guidelines and formats for retail disclosure of fuel source information to consumers by retail providers, and
- 3) Guidelines for annual submissions to the Energy Commission by retail providers.

These regulations governing the "Power Source Disclosure Program" went into effect on October 21, 1998, were amended March 5, 2002, and -are found in Title 20 of the California Code of Regulations, beginning with Section 1390.

The Power Content Label

The format adopted for disclosing retail electricity sources to consumers is called the "power content label" (pictured below). Using this label, consumers can compare the power "content" —or resource mix — of a given electricity product with that of the California Power Mix. The California Power Mix represents electricity consumed on a statewide basis, differentiated by fuel type, after subtracting out power that has been specifically claimed by retail providers and self-generation. Retail providers may use the California Power Mix as default and not make claims differentiating their power from the California Power Mix, or they may claim "specific purchases," which is defined as their actual power mix differentiated by fuel type based on purchases from specific generating facilities. Retail providers who make any claims differentiating their power from the California Power Mix are required to disclose their actual power mix as well as the California Power Mix. The power content label allows retail providers of electricity to distinguish their products from other electricity products in the market on the basis of the mix of resource or fuel type.

	PRODUCT NAME*	2004 CA POWER MIX**
ENERGY RESOURCES	(projected)	(for comparison)
Eligible Renewable	52%	4%
-Biomass & waste	-	<1%
-Geothermal	-	3%
-Small hydroelectric		1%
-Solar	-	<1%
-Wind	-	<1%
Coal	14%	29%
arge Hydroelectric	10%	20%
Natural Gas	22%	45%
Nuclear	1%	2%
Other	<1%	0%
TOTAL	100%	100%
50% of Product Name is specifical Percentages are estimated annua on the electricity sold to California	ally by the California Ene	argy Commission based

The Energy Commission also allows retail providers, at their option, to publish the gross system power (pictured below) in addition to their Power Content Label. Gross system power is the sum of all in-state generation and imports consumed in California by fuel type. The gross system power mix changes from year to year as generation resources are added to or removed from the mix. Retailers were allowed to add notes outside the Power Content Label that clarifies the distinction between the "CA Power Mix" and "gross system power." However, by statute, gross system power cannot be used in calculating the power content of a particular product and cannot be inserted in the column of the power content label as "CA power mix." The 2004 Gross System Power fuel mix listed below accounts for additional generation data received since the adoption of Net System Power in April, 2005. This version of the 2004 Gross System Power fuel mix is an update to the preliminary version that the Energy Commission used to calculate the 2004 Net System Power totals.

Fuel Type	2004 Gross System Power
Eligible Renewable	10.2%
-Biomass & waste	2.0%
-Geothermal	4.8%
-Small hydroelectric	1.6%
-Solar	0.3%
-Wind	1.5%
Coal	21.3%
Large hydroelectric	14.9%
Natural gas	40.8%
Nuclear	12.8%
Other	0.0%
Total	100.00%

By law, all retail providers must display a Power Content Label in product-specific written promotional materials, must send their customers quarterly label updates, and if specific purchases are claimed, provide them with an annual label that compares the actual annual resource mix with their projected annual mix. The annual label includes an explanation of variations greater than plus or minus five percentage points.

Seventh Year Status

Annual Retail Provider Reports Received

The Energy Commission received Annual Retail Provider Reports from 28 companies. Of these, 26 were retail providers, and 2 were wholesalers from which 21 retail providers purchased power. Retail providers Merced Irrigation District, PG&E, the Cities of Biggs, Burbank, and Needles did not submit Annual Reports for 2003 activity but submitted them in 2004. However, one retail provider, the City of Colton, submitted an annual report to the Energy Commission for 2003 but did not report on 2004 activity. The following is the list of all companies that submitted reports:

- 3Phases Energy Services
- Commonwealth Energy Corporation
- Green Mountain Energy
- City of Alameda
- Anaheim Public Utility District
- City of Azusa
- City of Biggs
- City of Burbank
- City of Healdsburg
- City of Lodi
- City of Lompoc
- Los Angeles Department of Water and Power
- Merced Irrigation District
- Modesto Irrigation District
- City of Needles
- Palo Alto Electric Utility
- Pacific Gas and Electric Company
- City of Redding
- City of Riverside
- City of Roseville
- Sacramento Municipal Utility District
- Silicon Valley Power
- Southern California Edison Company
- Surprise Valley Electrification Association
- Turlock Irrigation District
- City of Ukiah
- Bonneville Power Administration
- Northern California Power Authority

These companies collectively claimed specific purchases from 739 different generating facilities. Of the 739 generating facilities, 460 facilities are "renewable" as defined by SB 1305. Of the 460 renewable facilities claimed, 449 are either "registered" renewable generating facilities for

purposes of the Energy Commission's Renewable Energy Program, and/or certified as eligible for California's Renewable Portfolio Standard. More than one provider claimed generation from 37 of the 739 generating facilities.

Comparison of Retailer Claims									
Number of Generators Purchased From	<u>2003 Report</u> 374	<u>2004 Report</u> 739							
Generators claimed by more than one Retail Provider	33	37							
Renewable Generators Purchased From	238	460							
Registered Renewable Generators and RPS Certified Generators Purchased From	158	449							

The numbers of total generators, renewable generators, and registered and certified generators increased because PG&E claimed specific purchases for the first time for 2004 activity. Additionally, the number of Registered Renewable Generators and RPS Certified Generators also increased because renewable generators owned by investor-owned utilities were certified as eligible for the State's Renewable Portfolio Standard. In addition, the total specific purchase claims increased from the previous year's total of 102,481 gigawatt-hours to 174,939 gigawatt-hours, an increase of 72,458 gigawatt-hours.

Availability of Generation Data

To prepare this report, it was necessary to gather 2004 calendar year generation data for all 739 generating facilities claimed by the 26 retail providers. In analyzing the year 2004 claims, the Energy Commission supplemented its SB 1305 generation reports with data from the United States Energy Information Administration (EIA), and the Energy Commission, as described below.

Data from the Energy Information Administration

Generating facilities with a capacity above one megawatt are required to submit generation data to the EIA, using one or more various forms. The EIA has made data from some of the reporting forms publicly available on the Internet. In many cases, however, EIA aggregates generation data and it is not available on a unit-specific basis. The Energy Commission staff was able to obtain generator-specific data from EIA on utility-owned generating facilities, and non-utilityowned facilities from other sources. EIA data played an important part in the development of this report; it provided primary data in some cases, and served as a check for data submitted to both the Energy Commission's Electricity Office and the Renewable Energy Program.

In addition, the Energy Commission and energy agencies in the States of Washington and Oregon participated in a United States Department of Energy Department of Energy grant program, with the objective of developing an energy information/tracking system that ultimately would be applicable to the Western Electric Coordinating Council (WECC). The initial database using EIA data sources was developed. This database provides some of the monthly EIA data needed to prepare this report. This is a different database than the Western Renewable Energy Generation Information System (WREGIS), which will be discussed in a later section of this report.

Data from the California Energy Commission

The Energy Commission collects data about generation sources on a quarterly basis. The requirements for these reports are found in Title 20, California Code of Regulations, section 1301 et seq. Under law, each owner of an electric power plant over 1 megawatt in California is required to report the plant's nameplate capacity, fuel type, generation, and fuel usage to the Energy Commission. While plants with a nameplate capacity of 1 to 10 megawatts are required to report annually, generating facilities larger than 10 megawatts are required to report quarterly.

Energy Commission staff in the last year has improved the quality and quantity of data used to reconcile retail provider claims with available generation. Most of the data reported to the Energy Commission were for in-state power plants. Using this and information from the E1A, which has data for both in-state and out-of-state power plants, staff found all of the necessary available generation data easily accessible.

In 2004, the Energy Commission began to certify facilities that are eligible for the California's Renewable Portfolio Standard (RPS). However, the definition of "renewable" for the RPS program is different from that for the SB 1305 Power Source Disclosure Program. The Power Source Disclosure Program does not include ocean wave and ocean thermal technologies under its definition of renewable; while those technologies are eligible for RPS certification. The RPS statute, Senate Bill 1078 (Stats. 2002, ch. 516, § 1) also restricts the eligibility of certain types of biomass and small hydroelectric technologies.

In addition to certification under the RPS program, the Energy Commission continues to "register" renewable generating facilities through either the Existing or New Renewable Facilities Programs. Generating facilities that are registered and eligible for funding submit generation data to the Existing Renewable Facilities Program and the New Renewable Resources Account. These two programs have databases containing generation data for many of California's renewable generating facilities.

In 2003, the Western Governors Association and the Energy Commission began the development of WREGIS, which will serve as the tracking and verification system of the RPS program. Renewable facilities that are certified with the Energy Commission for the RPS program will be

required to participate in WREGIS. We anticipate that information from WREGIS will also be helpful in meeting our responsibilities under the Power Source Disclosure Program. Staff expects to use data from renewable facilities obtained from WREGIS to aid in preparing future reconciliation reports.

Until the implementation of WREGIS, the RPS Eligibility Guidebook requires that PG&E, Southern California Edison, and San Diego Gas and Electric report their previous year's annual procurement of renewables by generator by May 2nd of each year.

Reconciling Retail Providers' Claims

For calendar year 2004, the actual comparison of retail claims with generation data proved to be more complicated than in the prior year. The number of retail providers (including wholesalers and pools) increased from 24 to 28, and the number of generators increased from 374 to 739. Retailers claimed specific purchases totaling about 174,939 gigawatt-hours from generators that produced in excess of 262,189 gigawatt-hours. The staff checked to ensure that retail claims for a given generator were less than or equal to the amount of generation reported by that generator. For purposes of the Power Source Disclosure Program, it is not necessary to determine the disposition of all the power generated by each claimed generating facility.

Retail Provider	· Claims	
Specific Renewable Purchases (GWH) Total Specific Purchases (GWH)	2003 Report 15,127 102,481	<u>2004 Report</u> 25,266 174,939
Reporting Retail Providers		
Investor-Owned Utility	1	2
ESP	3	3
Municipal Utility	17	20
Electric Cooperative	1	1
Wholesaler/ Pool	2	2
Total	24	28

Plant-specific generation data for several generating facilities could not be found from any of the data sources listed in the previous section, but affidavits or audits by third parties submitted under the Power Source Disclosure Program corroborated the claims made for those facilities. While affidavits or audits by third parties may not give the same level of assurance as meter data or data submitted to the EIA, the Energy Commission staff believes that this source is sufficient for the purposes of this report. The staff will continue to close this data collection gap for next year's report.

Given the information available, all companies that complied with the reporting requirements appear to have purchased sufficient amounts of power of the specified fuel types to meet their claims to consumers.

Retail Provider Compliance

Appendix A of this report is a table that lists active retail providers and indicates their compliance with Power Source Disclosure Program requirements in 2004. In addition to showing compliance, Appendix A indicates whether or not the retail provider makes claims, and if so, the renewable percentage of the retail provider's product.

Out of 64 California retail electric providers, 26 retail providers claimed specific purchases for 2004 and all of them have submitted Annual Reports to the Energy Commission. Of those 26 retail providers that claimed specific purchases and submitted annual reports, one is an electric cooperative, three are energy service providers, two are investor-owned utilities, and 20 are publicly owned utilities. Retail providers that claim specific purchases are required to submit an audit of their sales and procurement to the Energy Commission.¹ The Energy Commission has received eight audits from the 26 retail providers that claimed specific purchases.

All retail providers, regardless of whether they claim Net System Power or specific purchases, are required to submit quarterly power content labels to the Energy Commission. Thirty-seven retail providers submitted quarterly power content labels; 13 of those used the California Mix and 23 used projections of their 2004 power mix. However, of the 26 retail providers that claimed specific purchases in 2004, 21 submitted annual labels.

For most retail providers, the proportion of their default product that is renewable is unknown because most providers claimed Net System Power for 2004. In 2004, three retail providers, all of which are ESPs, offered 100 percent renewable products as their default product. For the other retail providers, the renewable content of the default products ranged from 1 percent to 61 percent.

Although retail providers have claimed more electric generation as specific purchases than in previous years, the Power Source Disclosure Program is experiencing low levels of compliance. For example, only 37 out of 64 retail providers have submitted Power Content Labels and of the 26 providers who claimed specific purchases, only eight have submitted audits. Energy Commission staff informed retail providers of these requirements for 2004 in a February 14, 2005, letter sent to retail providers. Appendix A of this report lists all of the retail providers along with checkboxes that indicate whether they claimed specific purchases, submitted power content labels, annual reports, and audits for 2004.

Because of the differences between the SB 1305 definition of renewable and the definition outlined in SB 1078, the numbers posted under "% Renewable" under Appendix A may not be

¹ Municipal utilities with only specifically-claimed product can submit an attestation approved the municipal utility's governing body. However, municipal utilities with more than one specifically-claimed product are required to submit an audit.

the same as those used to demonstrate compliance with the RPS. Unlike the SB 1305 definition, SB 1078 prohibits certain types of biomass, allows for renewables purchased in previous years, and includes ocean wave and ocean thermal power.

Expectations for Next Year's Report

For the analysis of the year 2005 data, The Energy Commission anticipates having access to more complete data through filings and from the EIA for the analysis of the year 2005 data. The same time, the Energy Commission also anticipates an increase in the number of retail claims from municipal retail providers and investor-owned utilities while the number of traditional Electric Service Providers (ESPs) that claim specific purchases will likely remain constant. Staff expects additional specific claims from both investor- and publicly-owned utilities. The statutory requirements behind the RPS may compel additional retail providers to make claims and retail providers that are already claiming specific purchases may claim additional amounts of specific purchases.

Many changes were made to the Annual Retail Provider Reports after they had been submitted on time (March 1, 2005), and a number of reports were submitted late. These changes and late submissions created problems in determining the total amount of Specific Purchases used to calculate Net System Power, which must be reported by April 15 of each year. The staff will continue to take additional steps to provide retail providers with software packages to assist in preparing the Annual Retail Provider Report. The staff will also continue the high level of outreach to retail providers prior to the reporting date to assist in answering questions related to the reporting of specific purchases in the Annual Retail Provider Reports.

As California develops its RPS Program, staff will explore further interaction between the two programs. Facilities that could qualify for the RPS must be certified by the Energy Commission which would also make them a part of the WREGIS tracking system that is being developed by the Energy Commission and the Western Governors Association. The Power Source Disclosure Program could use data extracted from WREGIS for future reports.

			til provide t quarteri lat	This is the renewable content of the retail provider's default product, as based on the SB 1305 definition of renewable.					
Retail Provider	Specific Claims	1st Qtr. Label	2nd Qtr. Label	3rd Qtr. Label	4th Qtr. Label	Annual Label (True Up)		Audit or Letter of Attestation	% Renewable
Electric Cooperatives									
ANZA									
PLUMAS-SIERRA			\checkmark	\checkmark					
SUPRISE VALLEY			<						1%
VALLEY ELECTRIC ASSN.									
Electric Service Providers									
3Phases Electrical Consulting			~	\checkmark		\checkmark			100%
APS Energy Services		\checkmark		\checkmark	\checkmark				
American Utility Network (A.U.N.)					Ĺ				
Commonwealth	\checkmark						~		100%
Constellation NewEnergy								D	
Coral Energy					V				
City of Corona									
Calpine Power America									
Dynergy Marketing and Trade									

Retail Provider			t quarter!	ers are re y power c bels.				This is the renewable content of the retail provider's default product, as based on the SB 1305 definition of renewable.	
	Specific Claims	1st Qtr. Label	2nd Qtr. Label	3rd Qtr. Label	4th Qtr. Label	Annual Label (True Up)	Report	Audit or Letter of Attestation	% Renewable
Eastside Power Authority									
Green Mountain Energy Company						\checkmark			100%
Pilot Power Group, Inc.									
Quiet Energy									
Reliant Energy Services									
Sempra Energy Solutions			\checkmark						
Strategic Energy LLC			V						
Williams Energy Service									
Investor Owned Utilities									
BEAR VALLEY			V						
MOUNTAIN UTILITIES									
PACIFICORP									
PG&E		\checkmark	V	~		V		Ĺ	12%
S.D.G.&E.									
S.C.E.	\checkmark	~	V	V			\checkmark		18%

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Retail Provider			il provide t quarteri lat	This is the renewable content of the retail provider's default product, as based on the SB 1305 definition of renewable.					
	Specific Claims	1st Qtr. Label	2nd Qtr. Label	3rd Qtr. Label	4th Qtr. Label	Annual Label (True Up)	Report	Audit or Letter of Attestation	% Renewable
SIERRA-PACIFIC		V							
Power Pools									
Bonneville Power Administration (BPA)							✓	\checkmark	
Department of Water Resources									
Northern California Power Authority (NCPA)									
USBR-CVP									
USBR-PD									
WAPA									
Publicly Owned Utilities									
ANAHEIM	\checkmark	\checkmark	V		V	\checkmark	V		2%
AZUSA	V	\checkmark	V		\checkmark		~		7%
ALAMEDA			\checkmark	~			\checkmark		61%
BIGGS				~		V	~		19%
BANNING									
BURBANK			V			V	~		1%

Retail Provider			t quarterl	ers are re y power c bels.				This is the renewable content of the retail provider's default product, as based on the SB 1305 definition of renewable.	
	Specific Claims	1st Qtr. Label	2nd Qtr. Label	3rd Qtr. Label	4th Qtr. Label	Annual Label (True Up)		Audit or Letter of Attestation	% Renewable
CALAVERAS									
COLTON									
ESCONDIDO									
GRIDLEY									
GLENDALE									
HEALDSBURG							\checkmark		52%
IMPERIAL IRRIGATION DIST.			V	\checkmark	~				
LOS ANGELES D.W.P.			V	\checkmark		\checkmark			3%
LASSEN		\checkmark	V	\checkmark					
LODI		~	V						28%
LOMPOC			\checkmark	\checkmark			\checkmark		32%
MODESTO		~	\checkmark		\checkmark				5%
Metropolitan Water District									
MERCED	\checkmark	\checkmark			~		\checkmark		10%
NEEDLES									5%
PASADENA									

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Retail Provider			iil provid t quarter lat	This is the renewable content of the retail provider's default product, as based on the SB 1305 definition of renewable.					
	Specific Claims	1st Qtr. Label	2nd Qtr. Label	3rd Qtr. Label	4th Qtr. Label	Annual Label (True Up)	Report	Audit or Letter of Attestation	% Renewable
PALO ALTO					V	V			5%
REDDING	\checkmark			V	V	V	V		6%
RIVERSIDE	\checkmark	V	\checkmark	\checkmark		\checkmark			12%
ROSEVILLE		\checkmark		\checkmark		\checkmark	\checkmark		13%
S.F.H-H									
SMUD			V	\checkmark		V			11%
SHASTA									
SILICON VALLEY POWER		\checkmark		\checkmark	\checkmark		\checkmark		24%
TRINITY						\checkmark			
TRUCKEE		V	\checkmark	\checkmark	\mathbf{V}				
TUOLUMNE	. []								
TURLOCK		V	~			V	•		9%
UKIAH				\checkmark		\checkmark			52%
VERNON									