### **Electricity Demand Forecast Forms**

#### California Energy Commission 2011 Integrated Energy Policy Report Docket Number 11-IEP-1C

The following spreadsheets are the California Energy Commission (Energy Commission) forms for collecting data and analyses relating to electricity demand. The Energy Commission's statues and regulations specify that a broad array of information can be collected and analyzed to prepare the *Integrated Energy Policy Report*. Specifically, Public Resources Code (PRC) Section 25301 directs the Energy Commission to conduct regular assessments of all aspects of energy demand and supply to that it may develop energy policies that conserve resources, protect the environment, ensure energy reliability, enhance the state's economy, and protect public health and safety. To carry out these assessments the Energy Commission may require submission of data from market participants in California:

To perform these assessments and forecasts, the Energy Commission may require submission of demand forecasts, resource plans, market assessments, and related outlooks from electric and natural gas utilities, transportation fuel and technology suppliers, and other market participants. PRC 25301(a)

Submittal Format

Parties are requested to submit a diskette or compact disk containing: data from Forms 1, 2, 3, 6, 7, and 8, and

Data with no confidentiality request should be sent to:

California Energy Commission

**Docket Office** 

Attn: Docket 11-IEP-1C 1516 Ninth Street, MS-4 Sacramento, CA 95814-5512

or email to: Docket@energy.state.ca.us. Please include "Docket #11-IEP-1C Demand Forecast", in the subject line.

If you are requesting confidentiality, please review the detailed instructions.

**Historical Data Due Dates:** 

Forms 1.1a, 1.1b, 1.2 & 1.3& 1.4

Forms 1.7a, 1.7b, 1.7c & 2.2

Wednesday, February 9, 2011

Tuesday, March 01, 2011

The data do not need to be distributed to the IEPR service list.

Technical questions relating to the electricity demand forecast should be directed to Chris Kavalec (916) 654-5184 or Nick Fugate (916) 654-4219 of the Demand Analysis Office or by email at ckavalec@energy.state.ca.us or nfugate@energy.state.ca.us.

11-IEP-1C

DATE Feb 09 2011

RECD. Feb 09 2011

Please Enter the Following Information:

Participant Name: Redding Electric Utility

Date Submitted: 9-Feb-11

Contact Information: Steven B. Handy, PE, CEM

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#### **Historical Data Submittal**

#### **Entity to File Form** IOU POU **ESP** RETAIL SALES OF ELECTRICITY BY CLASS OR SECTOR (GWh) Form 1.1a Bundled & Direct Access Form 1.1b RETAIL SALES OF ELECTRICITY BY CLASS OR SECTOR (GWh) Χ Χ Bundled Customers Form 1.2 DISTRIBUTION AREA NET ELECTRICITY FOR GENERATION LOAD Χ Χ LSE COINCIDENT PEAK DEMAND BY SECTOR (Bundled Customers) Form 1.3 Χ Χ Form 1.4 DISTRIBUTION AREA COINCIDENT PEAK DEMAND Χ Χ Form 1.7a LOCAL PRIVATE SUPPLY BY SECTOR OR CLASS - ENERGY (GWh) Χ Χ LOCAL PRIVATE SUPPLY BY SECTOR OR CLASS - PEAK DEMAND Form 1.7b Form 1.7c LOCAL PRIVATE SUPPLY BY SECTOR OR CLASS - INSTALLED Χ CAPACITY (MW) ELECTRICITY RATE FORECAST Χ Χ Form 2.2

#### **FORM 1.1a**

#### Participant Name

#### RETAIL SALES OF ELECTRICITY BY CLASS OR SECTOR (GWh) Bundled & Direct Access

(Modify the categories below as needed to be consistent with forecast method)

	(Modify the o	categories beli	ow as needed	I to be consiste	nt with forecast	method)		
YEAI	R RESIDENTIAL	SMALL COMMERCIAL	LARGE COMMERCIAL & INDUSTRIAL	TOU	FIXED			TOTAL
200	0 324	104	242	24	1			695
200				24	1			693
200				19	1			722
200		106		15	1			754
200				12	3			766
200				12	1			770
200		121	277	12	1			798
200	7 379	120	282	12	0			793
200				12	0			798
200	9 387	116	271	12	1			786
201	0 375	114	264	12	1			766
201				12	1			783
201:				12	1			795
201	386	121	282	12	1			802
201		122		12	1			810
201				12	1			819
201		126		12	1			830
201				12	1			839
201	-	129		12	1			850
201			302	12	1			862
202				12	1			874
202		136		12	1			886
202	2 433	138	314	12	1			898

#### AVERAGE ANNUAL GROWTH RATE (%)

		(,,,							
2000-2009	2.0%	1.2%	1.3%	-7.2%	-2.5%	0.0%	0.0%	0.0%	1.4%
2009-2015	0.4%	1.2%	0.9%	0.2%	0.7%	0.0%	0.0%	0.0%	0.7%
2015-2022	1.3%	1.5%	1.3%	0.2%	0.0%	0.0%	0.0%	0.0%	1.3%
2009-2022	0.9%	1.4%	1.1%	0.2%	0.3%	0.0%	0.0%	0.0%	1.0%

### MIGRATING LOAD INCLUDED IN

Migrating/ Newly in F	Served Loa orecast	id included
Name of LSE / IOU	Name of LSE / IOU	Newly Served Load

#### FORM 1.1b

#### Participant Name

#### RETAIL SALES OF ELECTRICITY BY CLASS OR SECTOR (GWh) Bundled Customers

(Modify the categories below as needed to be consistent with forecast method)

		(Modify the c	categories belo	ow as needed	to be consister	nt with forecast	method)		
	YEAR	RESIDENTIAL	SMALL COMMERCIAL	LARGE COMMERCIAL & INDUSTRIAL	TOU	FIXED			TOTAL
ļ	2000				24	1			695
	2001	323		243	24	1			693
	2002	340			19				722
ļ	2003	361	106		15				754
	2004	364			12	3			766
ļ	2005	365			12	1			770
ļ	2006		121	277	12	1			798
	2007	379			12	0			793
ļ	2008	386			12	0			798
ļ	2009	387	116		12	1			786
ļ	2010				12	1			766
١	2011	380		273	12	1			783
١	2012	383			12	1			795
١	2013			282	12	1			802
١	2014		122	284	12	1			810
١	2015				12	1			819
١	2016				12	1			830
Į	2017	405			12	1			839
١	2018			298	12	1			850
	2019	416	132	302	12	1			862
١	2020	422	134	306	12	1			874
	2021	427			12				886
ı	2022	433	138	314	12	1			898

#### AVERAGE ANNUAL GROWTH RATE (%)

		(,,,							
2000-2009	2.0%	1.2%	1.3%	-7.2%	-2.5%	0.0%	0.0%	0.0%	1.4%
2009-2015	0.4%	1.2%	0.9%	0.2%	0.7%	0.0%	0.0%	0.0%	0.7%
2015-2022	1.3%	1.5%	1.3%	0.2%	0.0%	0.0%	0.0%	0.0%	1.3%
2009-2022	0.9%	1.4%	1.1%	0.2%	0.3%	0.0%	0.0%	0.0%	1.0%

### MIGRATING LOAD INCLUDED IN

Migrating/ Newly Sin F	orecast	
Name of LSE /	Name of LSE / IOU	Newly Served Load

## FORM 1.2 Participant Name

## DISTRIBUTION AREA NET ELECTRICITY FOR GENERATION LOAD (GWh)

								TOTAL
	SALES TO			Other Departed				DISTRIBUTION
	BUNDLED		COMMUNITY	Load remaining				SYSTEM
	CUSTOMERS	DIRECT	CHOICE	in distribution	OTHER (Define			ENERGY
YEAR	(from 1.1b)	ACCESS	AGGREGATORS	system	as needed)	TOTAL SALES		REQUIREMENTS
2000	695					695	48	
2001	693					693	47	740
2002	722					722	40	
2003	754					754	42	797
2004	766					766	41	807
2005	770					770	30	
2006	798					798	46	
2007	793					793	43	
2008	798					798	44	843
2009	786					786	41	827
2010	766					766	46	
2011	783					783	45	
2012	795					795	45	839
2013	802					802	45	
2014	810					810	46	856
2015	819					819	46	866
2016	830					830	47	877
2017	839					839	47	887
2018	850					850	48	898
2019	862					862	49	911
2020	874					874	50	924
2021	886					886	50	
2022	898					898	51	949

Total Uncommitted	Forecast Net of
Impacts from Form	Uncommitted
3.2	Impacts
0	743
0	740
0	763
0	797
0	807
0	800
0	844
0	836
0	843
0	827
0	812
0	828
0	839
0	847
0	856
0	866
0	877
0	887
0	898
0	911
0	924
0	937
0	949

AVERAGE A	AVERAGE ANNUAL GROWTH RATE (%)												
2000-2009	1.4%	0.0%	0.0%	0.0%	0.0%	1.4%	-1.9%	1.2%					
2009-2015	0.7%	0.0%	0.0%	0.0%	0.0%	0.7%	2.1%	0.8%					
2015-2022	1.3%	0.0%	0.0%	0.0%	0.0%	1.3%	1.4%	1.3%					
2009-2022	1.0%	0.0%	0.0%	0.0%	0.0%	1.0%	1.7%	1.1%					

0.0%	1.2%
0.0%	0.8%
0.0%	1.3%
0.0%	1.1%

#### **FORM 1.3**

#### Redding Electric Utility

#### LSE COINCIDENT PEAK DEMAND BY SECTOR (Bundled Customers)

(MW)
(Modify categories below to be consistent with sectors or classes reported on Form 1.1)

					LARGE				
	RESI	DENTIAL	SMALL CO	MMERCIAL	COMMERCI				
	BASE	WEATHER		WEATHER	AL &				TOTAL PEAK
YEAR	LOAD	SENSITIVE	BASE LOAD	SENSITIVE	INDUSTRIAL	TOU	FIXED		**
2000									211
2001									203
2002									227
2003									245
2004									228
2005									244
2006									253
2007									246
2008									247
2009									248
2010									234
2011									252
2012									255
2013									258
2014									261
2015									263
2016									266
2017									270
2018									273
2019									277
2020									280
2021									284
2022									289

<sup>\*\*</sup> Redding is unable to break-down the demand load by class, baseload, weather sensitive and losses categorie

AVERAGE ANNUAL GROWTH RATE (%)												
2000-2009	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	1.8%	
2009-2015	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	1.0%	
2015-2022	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	1.4%	
2009-2022	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		0.0%	1.2%	

#### MIGRATING LOAD INCLUDED IN FORECAST (MW)

Migrating/ Newly	Migrating/ Newly Served Load included in Forecast								
Name of LSE / IOU	Name of LSE / IOU	Newly Served Load							

0.0%	0.0%	0.0%
0.0%	0.0%	0.0%
0.0%	0.0%	0.0%
0.0%	0.0%	0.0%

#### **FORM 1.4**

#### Redding Electric Utility

#### DISTRIBUTION AREA COINCIDENT PEAK DEMAND

(MW)

	BUNDLED CUSTOMER PEAK			COMMUNIT	TY CHOICE	OTHER PUBL	ICLY OWNED	OTHER	TOTAL PEAK	Total Uncommitte MW Impacts	d Forecast Net of
YEAR	(from 1.3)	DIRECT	ACCESS	AGGREO	GATORS	DEPARTI	NG LOAD	(DEFINE)	DEMAND	from Form	Impacts
	,	End User Peak		End User Peak		End User Peak		, ,			
		Demand	Losses	Demand	Losses	Demand	Losses				
2000	211								211		211
2001	203								203		203
2002	227								227		227 245
2003									245		
2004									228		228
2005									244	#REF!	#REF!
2006									253	#REF!	#REF!
2007									246	#REF!	#REF!
2008									247	#REF!	#REF!
2009									248	#REF!	#REF!
2010									234	#REF!	#REF!
2011									252	#REF!	#REF!
2012									255	#REF!	#REF!
2013									258	#REF!	#REF!
2014									261	#REF!	#REF!
2015									263	#REF!	#REF!
2016									266	#REF!	#REF!
2017									270	#REF!	#REF!
2018									273	#REF!	#REF!
2019									277	#REF!	#REF!
2020									280	#REF!	#REF!
2021									284	#REF!	#REF!
2022	289								289	#REF!	#REF!

AVERAGE A	AVERAGE ANNUAL GROWTH RATE (%)								
2000-2009	1.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.8%
2009-2015	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%
2015-2022	1.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.4%
2009-2022	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2%

0.0%	#REF!
#REF!	#REF!
#REF!	#REF!
#REF!	#REF!

#### **FORM 1.7a**

#### **Participant Name**

## Committed/Existing LOCAL PRIVATE SUPPLY BY SECTOR OR CLASS AND TECHNOLOGY ENERGY (GWh)

Redding does not have significant Local Private Supply or behind the meter data to be able to report

	Photovoltaic							
YEAR	RESIDENTIAL	COMMERCIAL	INDUSTRI	AGRICULTURAL	OTHER	TOTAL		
			AL					
2000								
2001								
2002								
2003								
2004								
2005								
2006								
2007								
2008								
2009								
2010								
2011								
2012								
2013								
2014								
2015								
2016								
2017								
2018								
2019								
2020								
2021								
2022								

		Combined Heat and Po	wer (Speci	fy Technology)		
YEAR	RESIDENTIAL	COMMERCIAL		AGRICULTURAL	OTHER	TOTAL
			AL			
2000						
2001						
2002						
2003						
2004						
2005						
2006						
2007						
2008						
2009						
2010						
2011						
2012						
2013						
2014						
2015						
2016						
2017						
2018						
2019						
2020						
2021						
2022						

### **FORM 1.7a**

### **Participant Name**

# Committed/Existing LOCAL PRIVATE SUPPLY BY SECTOR OR CLASS AND TECHNOLOGY ENERGY (GWh)

		Other (Spec	ify Technol	ogy)		
YEAR	RESIDENTIAL	COMMERCIAL	INDUSTRI	AGRICULTURAL	OTHER	TOTAL
			AL			
2000						
2001						
2002						
2003						
2004						
2005						
2006						
2007						
2008						
2009						
2010						
2011						
2012						
2013						
2014						
2015						
2016						
2017						
2018						
2019						
2020						
2021						
2022						

#### **FORM 1.7b**

#### **Participant Name**

#### **Committed/Existing**

## LOCAL PRIVATE SUPPLY BY SECTOR OR CLASS AND TECHNOLOGY COINCIDENT PEAK DEMAND (MW)

Redding does not have significant Local Private Supply or behind the meter data to be able to report

		Phot	ovoltaic			
YEAR	RESIDENTIAL	COMMERCIAL	INDUSTRI AL	AGRICULTURAL	OTHER	TOTAL
2000						
2001						
2002						
2003						
2004						
2005						
2006						
2007						
2008						
2009						
2010						
2011						
2012						
2013						
2014						
2015						
2016						
2017						
2018						
2019						
2020						
2021						
2022						

		Combined Heat and Po	wer (Speci	fy Technology)		
YEAR	RESIDENTIAL	COMMERCIAL		AGRICULTURAL	OTHER	TOTAL
			AL			
2000						
2001						
2002						
2003						
2004						
2005						
2006						
2007						
2008						
2009						
2010						
2011						
2012						
2013						
2014						
2015						
2016						
2017						
2018						
2019						
2020						
2021						
2022						

#### **FORM 1.7b**

#### **Participant Name**

#### Committed/Existing

### LOCAL PRIVATE SUPPLY BY SECTOR OR CLASS AND TECHNOLOGY COINCIDENT PEAK DEMAND (MW)

Other (Specify Technology)								
YEAR	RESIDENTIAL	COMMERCIAL	INDUSTRI AL	AGRICULTURAL	OTHER	TOTAL		
2000								
2001								
2002								
2003								
2004								
2005								
2006								
2007								
2008								
2009								
2010								
2011								
2012								
2013								
2014								
2015								
2016								
2017								
2018								
2019								
2020								
2021								
2022								

#### **FORM 1.7c**

### **Participant Name**

# Committed/Existing LOCAL PRIVATE SUPPLY BY SECTOR OR CLASS AND TECHNOLOGY Installed Capacity (MW)

		Photo	ovoltaic			
YEAR	RESIDENTIAL	COMMERCIAL	INDUSTRI	AGRICULTURAL	OTHER	TOTAL
			AL			
2000		0				0
2001		0				0
2002		0				0
2003	0	0				0
2004		0				0
2005		0				0
2006		0				0
2007	0	0				0
2008		0				0
2009		0				0
2010	0	0				0
2011		1				2
2012		1				2
2013		1				2
2014		1				2
2015		1				2
2016		1				2
2017		1				2
2018		1				2
2019		1				2
2020		1				2
2021		1				2
2022		1				2

	Combined Heat and Power (Specify Technology)										
VEAD	DECIDENTIAL			OTLIED	TOTAL						
YEAR	RESIDENTIAL	COMMERCIAL		AGRICULTURAL	OTHER	TOTAL					
			AL								
2000											
2001											
2002											
2003											
2004											
2005											
2006											
2007											
2008											
2009											
2010											
2011											
2012											
2013											
2014											
2015											
2016											
2017											
2018											
2019											
2020											
2021											
2022			+								

#### **FORM 1.7c**

### **Participant Name**

# Committed/Existing LOCAL PRIVATE SUPPLY BY SECTOR OR CLASS AND TECHNOLOGY Installed Capacity (MW)

	Other (Specify Technology)									
YEAR	RESIDENTIAL	COMMERCIAL	INDUSTRI	AGRICULTURAL	OTHER	TOTAL				
			AL							
2000										
2001										
2002										
2003										
2004										
2005										
2006										
2007										
2008										
2009										
2010										
2011										
2012										
2013										
2014										
2015										
2016										
2017										
2018										
2019										
2020										
2021										
2022										

#### **FORM 2.2**

#### **Redding Electric Utility**

#### **ELECTRICITY RATE FORECAST**

(2009 cents/kWh)

(Modify categories below to be consistent with sectors or classes reported on Form 1.1)

			., caregeries as:				 
			CMALL	COMMERCIA			1
\/E 4 B	OD!(0000 4)	DECIDENTIAL	SMALL	L &	TOLL	FIVED	
YEAR	,	RESIDENTIAL		INDUSTRIAL	TOU	FIXED	
2000	0.803		14	13	11	28	
2001	0.846		13	12	10	25	
2002	0.86		12	11	9	21	
2003	0.875	10	11	10	9	19	
2004	0.887	10	11	10	9	6	
2005	0.904	10	11	10	10	13	
2006	0.933	10	11	10	9	18	
2007	0.963	10	11	10	9	23	
2008	0.998	11	11	10	10	22	
2009	1	11	12	11	10	17	
2010	1.009	12	13	12	11	17	
2011	1.026	13	14	13	12	22	
2012	1.047	14	15	13	12	23	
2013	1.068	14	16	14	12	24	
2014	1.089	15	16	15	13	25	
2015	1.111	16	17	15	13	26	
2016	1.133	16	17	15	13	26	
2017	1.156	16	17	15	13	26	
2018	1.179	16	17	15	13	27	
2019	1.203	16	17	15	13	27	
2020	1.227	17	18	16	13	27	
2021	1.251	17	18	16	13	28	
2022	1.276	17	18	16	13	28	

AVERAGE ANNUAL GROWTH RATE (%)								
2000-2009	2.5%	-0.9%	-1.0%	-1.4%	-0.4%	-5.2%	0.0%	0.0%
2009-2015	1.8%	5.4%	5.2%	5.1%	3.8%	7.1%	0.0%	0.0%
2015-2022	2.0%	1.4%	1.0%	0.7%	0.5%	1.0%	0.0%	0.0%
2009-2022	1.9%	3.2%	2.9%	2.7%	2.0%	3.7%	0.0%	0.0%

Confidentiality requests have previously been granted for this data