

# **California Energy Resources Scheduling**

**A Division of  
California Department of Water Resources**

**Activities and Expenditures Report  
Year Ended December 31, 2008**

**(Provides Data as Required by Section 80250 of the California Water Code )**



# Activities and Expenditures Report For The Year Ended December 31, 2008

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# Activities and Expenditures Report

## Preface

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Pursuant to the reporting requirement in Section 80250 of the California Water Code, the following information reflects energy acquisition activities and expenditures incurred by the California Energy Resources Scheduling Division (CERS) of the Department of Water Resources for the year 2008. Included are all costs related to energy acquisition and administration.

CERS purchases power under the terms of its existing contracts, all of which were entered into prior to January 1, 2003. The scheduling, dispatch and certain other administrative functions for the existing contracts are managed by the investor owned utilities. CERS continues to have financial and legal responsibility for its contract portfolio and will oversee repayment of the revenue bonds.

The audited financial statements for the years ended June 30, 2008 and 2007, and the un-audited financial statements for the quarter ended December 31, 2008, prepared in accordance with generally accepted accounting principles, can be referenced at the following link: [http://www.cers.water.ca.gov/financial\\_bonds.cfm](http://www.cers.water.ca.gov/financial_bonds.cfm)

This report is available on the DWR website at [www.cers.water.ca.gov](http://www.cers.water.ca.gov).

# CERS History

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## **Winter 2000-2001**

Spot market prices skyrocket to \$2,000 a megawatt hour while averaging about \$400 per MWh – nearly 10 times the cost of power at the same time in the previous year.

Debt grows for California's investor-owned utilities (IOUs) as purchased power costs exceed what they are able to recoup from ratepayers. Suppliers refuse to sell to IOUs over credit concerns.

Large amounts of generators off-line resulting in statewide rotating blackouts.

## **Governor Issues Emergency Proclamation**

On January 17, 2001, the Governor issues an Emergency Proclamation directing the Department of Water Resources (DWR) to purchase power on behalf of the State's IOU customers.

DWR created a new division within DWR, the California Energy Resources Scheduling (CERS) division, that immediately began purchasing power. During the summer of 2001 alone, CERS had purchased 17,000 megawatts of electricity, enough power to supply about 17 million homes and businesses. By the end of 2001, CERS spent nearly \$11 billion to keep the power flowing in California.

## **Long-Term Power Contracts**

To reduce its daily exposure to the volatile spot energy market, CERS entered into various long-term contracts to lock in more stable, predictable prices.

The contracts also resulted in an injection in new power supplies by providing a guaranteed revenue source needed to finance more than 5,000 megawatts of newly built power plants. In total, the Department entered into 58 long-term agreements in 2001 and 2002 at a cost of \$42 billion.

# CERS History – Cont.

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## Power Markets Stabilize - Reliability Restored

The average spot market price of electricity fell from \$355 per megawatt hour in January 2001 to \$72 a megawatt hour just five months later. There were no power interruptions in the summers of 2001 or 2002.

CERS concluded its daily power purchases operation on January 1, 2003, successfully returning that responsibility to the utilities who were able to improve their credit standing during DWR's nearly two years as California's principal power buyer.

## CERS Today

The utilities currently act as CERS' agent in managing and dispatching the energy associated with the long-term contracts. Absent full assignment of the contracts to the utilities, CERS fulfills its financial and legal responsibilities for the contracts by auditing the utilities' performance to ensure accurate billing and supplier compliance with contract terms, as well as reviewing and approving utility gas supply plans and financial hedging for those contracts with gas tolling arrangements.

CERS also services \$9.5 billion in bonds. Initial bond proceeds of \$11.3 billion in 2002 were used to repay \$6.5 billion to the General Fund, retire a \$3.4 billion short-term loan, and to maintain adequate reserve levels.

CERS produces an annual Revenue Requirement – filed with the California Public Utilities Commission – that specifies the contract and bond-related expenses that must be recovered from the utility customers, and actively monitors and reports on its revenue flows and operating balances in compliance with its financial duties related to the bonds.

# Refunds

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The state is still seeking refunds on short-term electricity purchases DWR made during the energy crisis on behalf of the IOUs. There are two categories of claims, one from FERC jurisdictional entities (power marketer, investor-owned utilities) and the other from non-FERC jurisdictional entities (municipal utilities, and other governmental entities). The three IOUs - PG&E, SCE, and SDG&E are also seeking refunds on their short-term electricity purchases during the summer 2000 period up to January 2001 when DWR began purchasing electricity on their behalf.

## Refund Claims (against Municipal and Non-Jurisdictional Entities) at 100% of Face Value

DWR	\$645,952,553
All CA Parties (including DWR)	\$1,245,387,533

## Refund Claims (against FERC Jurisdictional Entities) at 100% of Face Value

DWR	\$1,900,481,846
All CA Parties (including DWR)	\$3,058,149,318

As of December 31, 2008 DWR will have received \$867.4 million in refunds on short-term, electricity purchases during the energy crisis. Another \$72.6 million in refunds to DWR is being held in escrow accounts waiting for resolution of other pending claims against the energy suppliers.

The refunds are used to offset the cost of the electricity DWR is currently purchasing under the long-term energy contracts that it entered into on behalf of the three IOUs.

# Long-Term Contracts Summary

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- **Number of Original agreements: 58**
- **Original portfolio projected cost: \$42.5 billion**
- **Agreements Renegotiated: 35**
- **Number of original counter-parties: 30** – Allegheny, Alliance Colton, BPA, CalPeak, Calpine, Capitol, Clearwood, Constellation, High Desert, Coral, Dynegy, El Paso, GWF, Intercom, Kings River, PG&E Energy Trading, PacifiCorp, Pinnacle West, Mirant, Morgan Stanley, Primary Power (Imperial Valley), PX Block Forward, San Francisco, Santa Cruz, Sempra, Soledad, Sunrise, Whitewater Energy, Williams, Wellhead.
- **Number of counter-parties with renegotiated contracts: 19** -- Calpine, High Desert, Constellation, Whitewater Energy, Capitol Power, CalPeak, GWF, Colton Power, Mountain View Power Partners (formerly PG&E Trading contract), Williams, Clearwood, Wellhead, County of Santa Cruz, Sunrise Power, Goldman Sachs (formerly Allegheny contract), Soledad, El Paso, Morgan Stanley, Mirant.
- **Cost reductions through renegotiations: Approximately \$7.5 billion**
- **Agreements expired: 28**
- **Agreements terminated: 4**
- **Number of agreements remaining (from original 58): 26**
- **Current projected portfolio cost (2008-2015): \$9.8 billion**
- **Portion of portfolio cost that is the cost of natural gas: \$4.8 billion**

DWR's long-term contracts are available at [www.cers.water.ca.gov](http://www.cers.water.ca.gov).

# Summary of Current CDWR-CERS Contracts Portfolio

Contract Types	Contracts by IOU Allocation (Contracts in Effect 2009)		
	PG&E	SCE	SDG&E
<b>Market Resources</b> (Fixed Price & Quantity)	Calpine 1	Goldman Sachs (formally Alleghany)  JP Morgan Gas Supply Contract (formally Williams)	JP Morgan - Product B&C (formally Williams)  JP Morgan Gas Supply Contract (formally Williams)
<b>Portfolio of Resources</b> (May also be provided from market)	Coral  Iberdrola (formally Pacificorp)	Sempra	
<b>Unit Specific Resources</b> (Dispatchable, except 3 wind contracts)	Calpeak (Panoche)  Calpeak (Vaca-Dixon)  Calpine 2 (Reneg.)  Calpine 3  CCSF  GWF  KRCD  Wellhead (Fresno)  Wellhead (Gates)  Wellhead (Panoche)	Colton Power  High Desert  Mountainview Wind (formally PG&E ET)  JP Morgan - Product D (formally Williams)	Calpeak (Border)  Calpeak (El Cajon)  Calpeak (Enterprise)  Sunrise  Shell Wind Energy (formally WhtWtr. Cabazon)  Shell Wind Energy (formally WhtWtr. Hill)

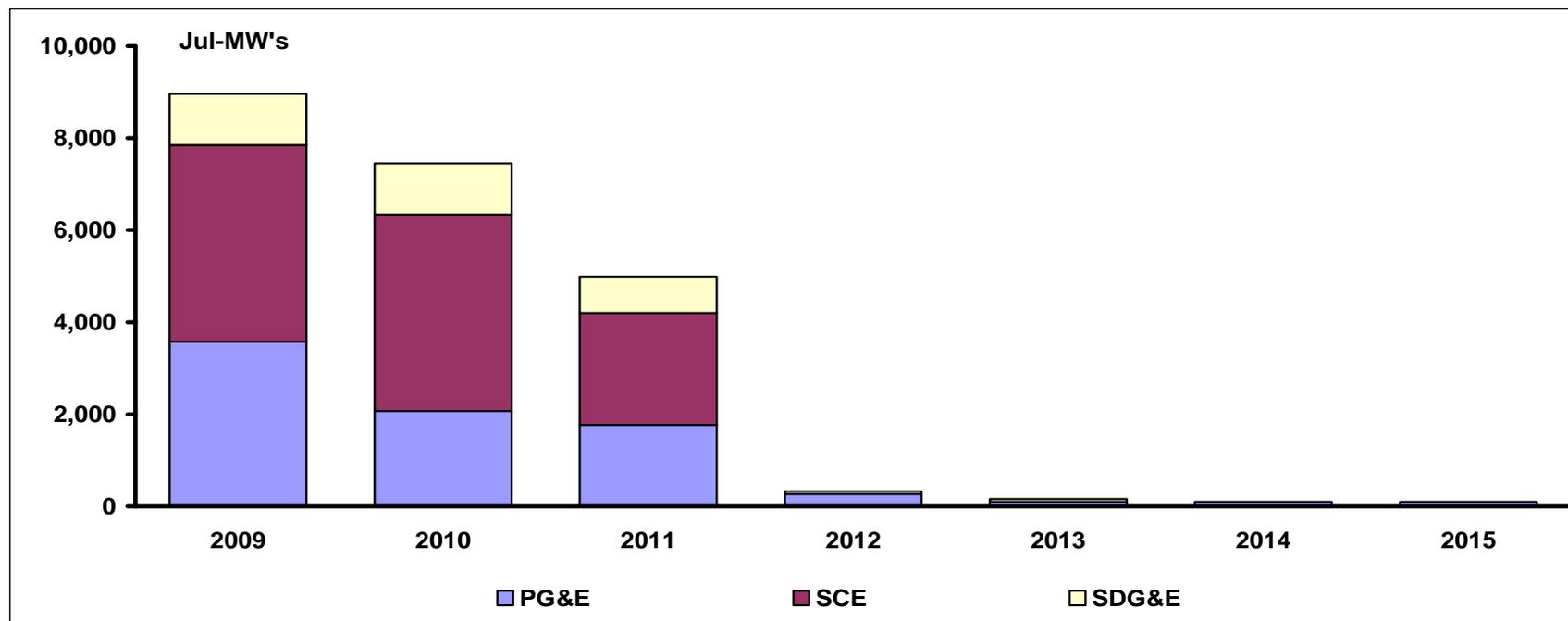
# Expiration Dates of Current CDWR-CERS Contract Portfolio

Contracts in Effect 2009 (Year-end expiration unless otherwise noted)						
2009	2010	2011	2012	2013	2014	2015
Calpine 1	<b>Colton Power</b> (Oct-'10)	<b>Calpeak(s)</b> (2 projects Oct-'11, 3 projects Dec-'11)	<b>Calpine 2</b> (reneg. w/ 3-Yr option)	<b>Shell Wind Energy</b> (Cabazon)	No Contracts Expire	<b>Kings River</b> (May-'15)
	<b>JP Morgan</b> (formally Williams) (Product B,C,D)	<b>Calpine 3</b> (Jul-'11)	<b>Coral</b> (Jun-'12)	<b>Shell Wind Energy</b> (Hill)		<b>CCSF</b>
	<b>JP Morgan Gas</b> (formally Williams)	<b>Goldman Sachs</b> (formally Allegheny)	<b>GWF Ph3</b> (Oct-'12)			
		<b>GWF</b> (Phase 1 & 2)	<b>Sunrise</b> (Jun-'12)			
		<b>High Desert</b> (Mar-'11)				
		<b>Mountview Wind</b> (formally PG&E ET) (Sept-'11)				
		<b>Iberdrola</b> (formally Pacificorp) (Jun-'11)				
		<b>Sempra</b> (Sept-'11)				
		<b>Wellhead(s)</b> (Oct-'11)				
<b>Contract MW's Expiring*</b> (non-coincident)						
1,000	1,450	4,670	1,520	100	---	290

(\*) MW's shown were available during all or part of the calendar year that will not be available the following year.  
Contract MW's expiring are non-coincident and not cumulative due to expiration date and annual MW's may vary.

# Summary of CDWR-CERS Contract Capacity (MW's)

(By IOU Contract Allocation)

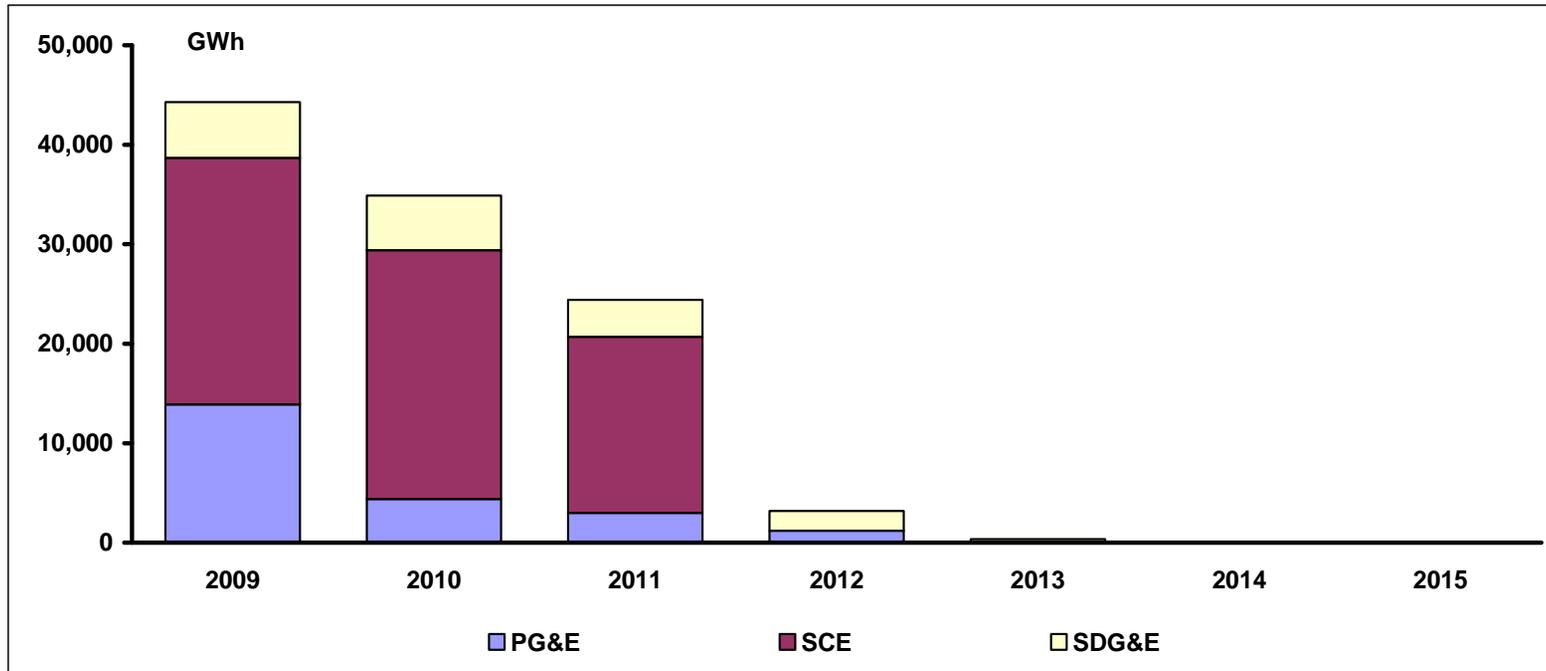


Contract Capacity (Jul-MW)	2009	2010	2011	2012	2013	2014	2015
PG&E	3,580	2,070	1,770	270	100	100	100
SCE	4,270	4,270	2,430	0	0	0	0
SDG&E	1,110	1,110	790	60	60	0	0
<b>TOTAL</b>	<b>8,960</b>	<b>7,450</b>	<b>4,990</b>	<b>330</b>	<b>160</b>	<b>100</b>	<b>100</b>

Data: CDWR-CERS revenue requirement model (PM14).

# Summary of Contract Energy (GWh)

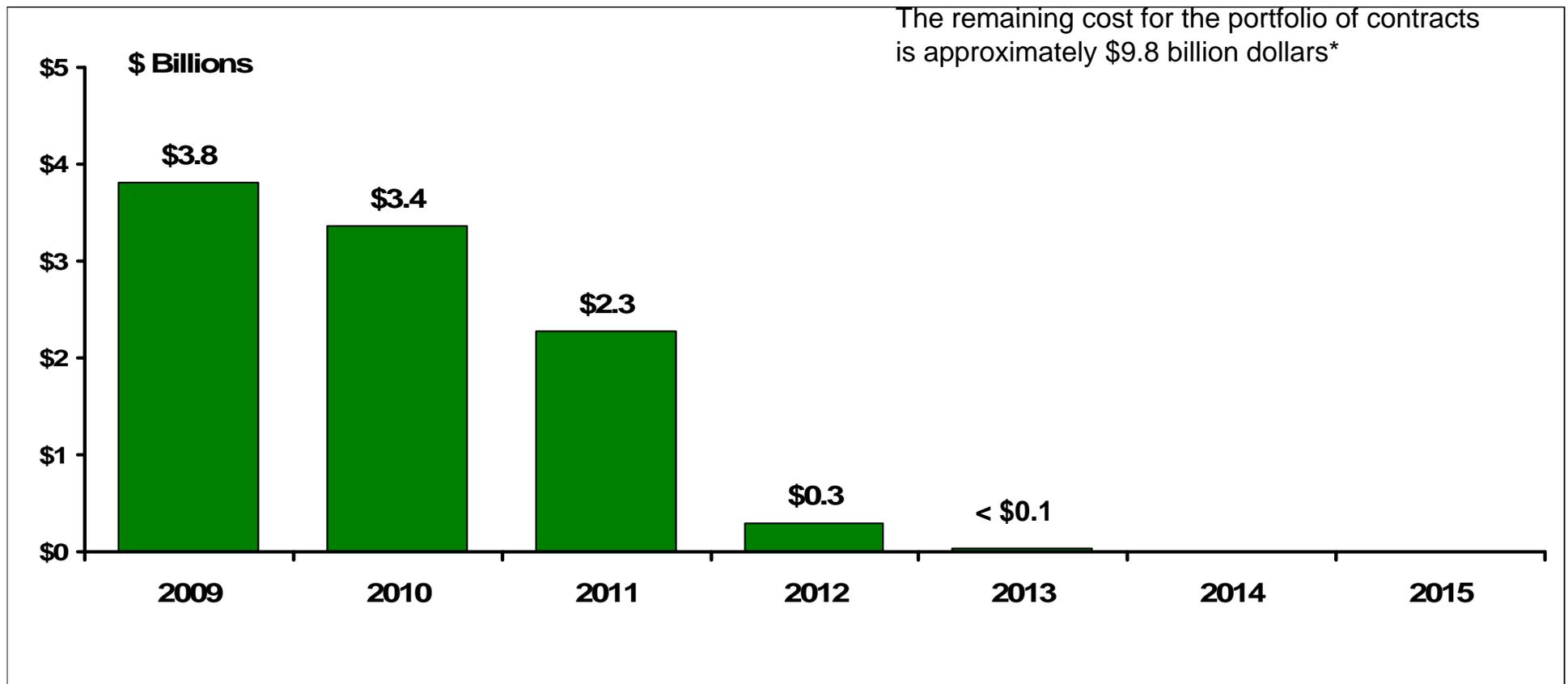
(By IOU Contract Allocation)



Contract Energy (GWh)	2009	2010	2011	2012	2013	2014	2015
PG&E	13,900	4,400	3,000	1,200	50	50	40
SCE	24,800	25,000	17,700	0	0	0	0
SDG&E	5,600	5,500	3,700	2,000	300	0	0
<b>TOTAL</b>	<b>44,300</b>	<b>34,900</b>	<b>24,400</b>	<b>3,200</b>	<b>350</b>	<b>50</b>	<b>40</b>

Data: CDWR-CERS revenue requirement model (PM14).

# Summary of CDWR-CERS Contract Costs – 2008 thru 2015



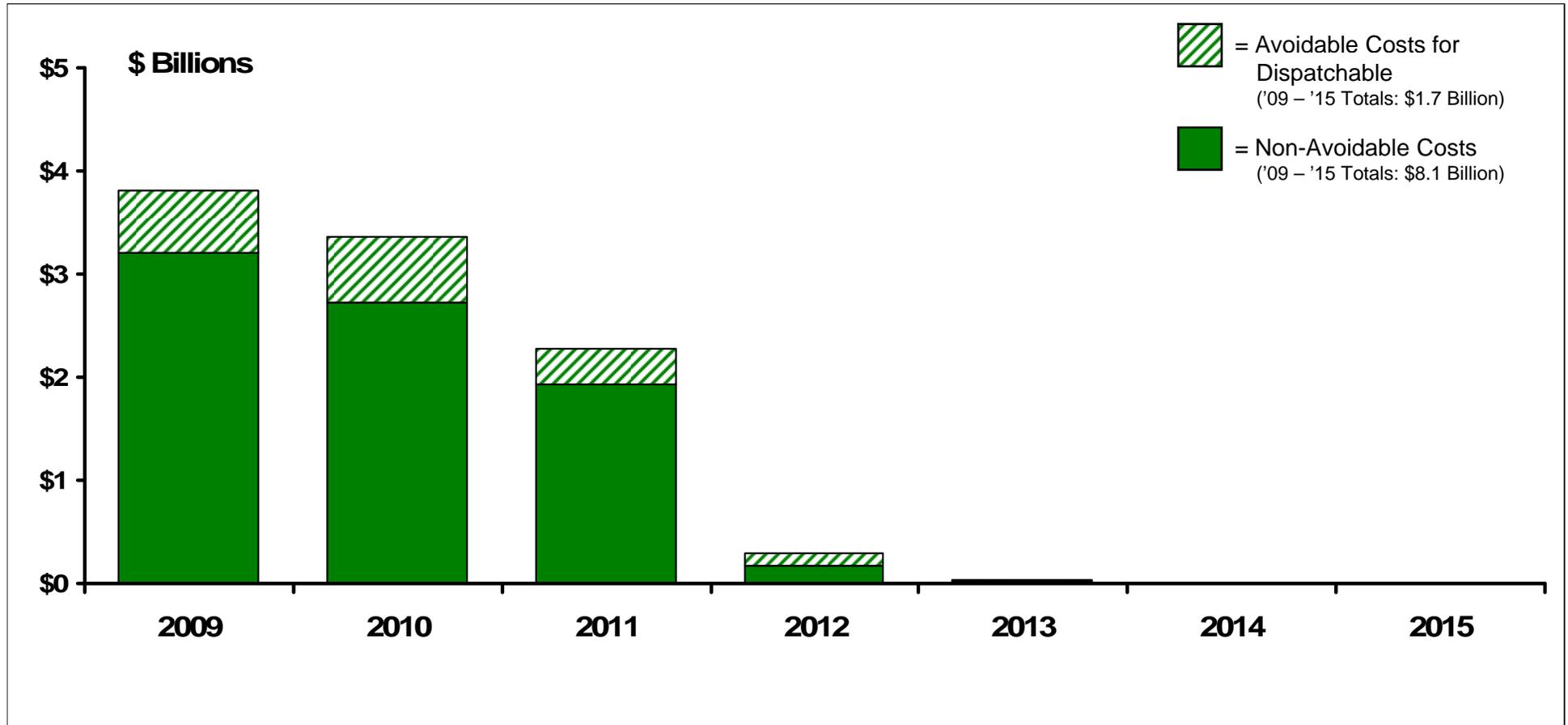
Note: Data from CDWR-CERS revenue requirement model (PM14).

(\*) Annual projections may vary due to updates to gas price forecasts, contract utilization, and other assumptions.

**Excludes Williams Gas Supply Contract, revenue from surplus energy sales, bond charges, reserves, and other costs.**

# Summary of CDWR-CERS Contract Costs – 2008 thru 2015 (cont.)

(Additional breakdown between Non-Avoidable and Avoidable Costs)



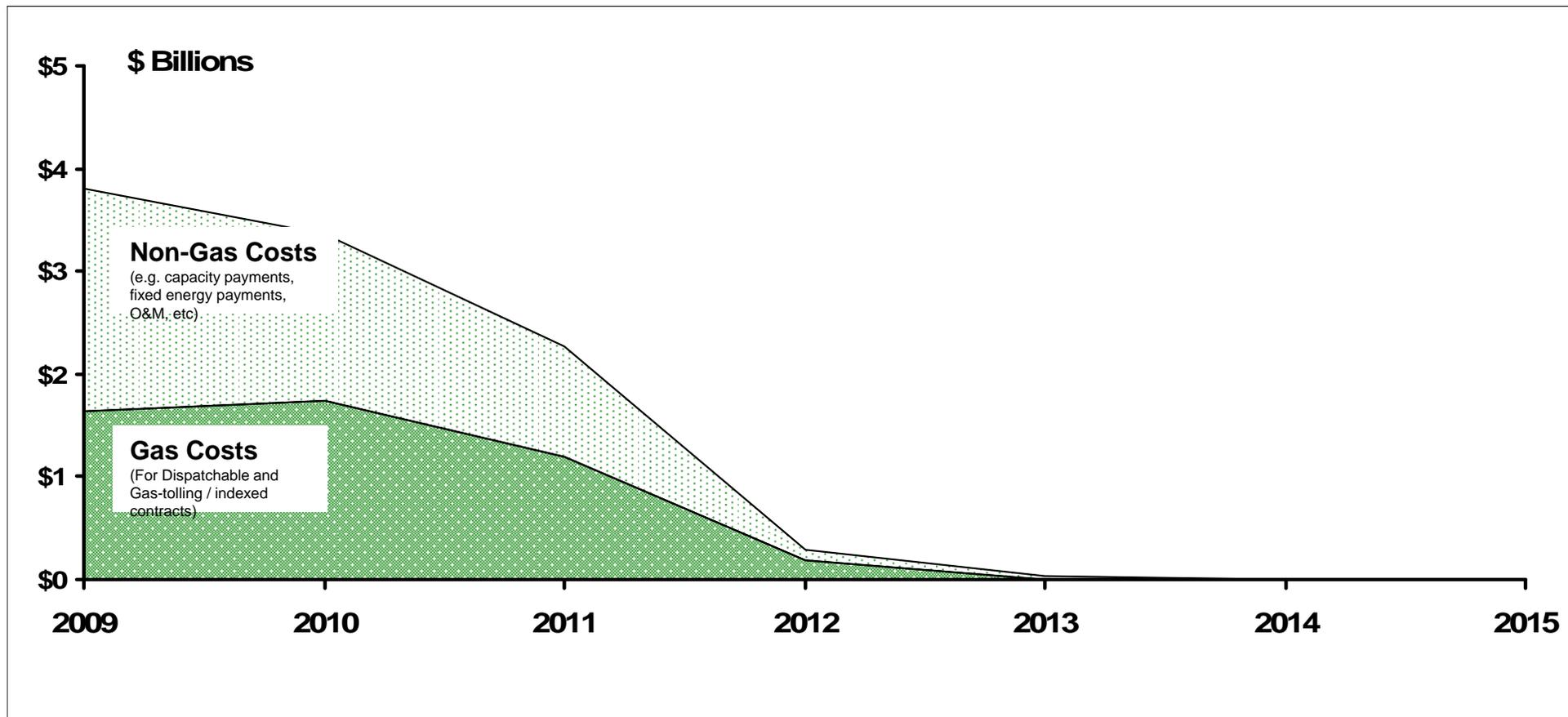
Note: Data from CDWR-CERS revenue requirement model (PM14).

(\*) Annual projections may vary due to updates to gas price forecasts, contract utilization, and other assumptions.

**Excludes Williams Gas Supply Contract, revenue from surplus energy sales, bond charges, reserves, and other costs.**

# Summary of CDWR-CERS Contract Costs – 2008 thru 2015 (cont.)

(Of the remaining \$9.8 Billion contract costs, \$4.8 Billion (49%) is for natural gas costs)



Note: Data from CDWR-CERS revenue requirement model (PM14).

(\*) Annual projections may vary due to updates to gas price forecasts, contract utilization, and other assumptions.

**Excludes Williams Gas Supply Contract, revenue from surplus energy sales, bond charges, reserves, and other costs.**

# Revenue Requirement

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Pursuant to Sections 80110 and 80134 of the California Water Code and the March 8, 2002 Rate Agreement between DWR and CPUC, DWR notifies CPUC of its projected costs for the upcoming calendar year by submitting a Revenue Requirement.

The Revenue Requirement includes projected costs for the energy and administration of the long-term contracts for an upcoming calendar year. These cost projections take into account the amount of energy from the contracts expected to be dispatched to customers, sales from surplus energy, the costs of natural gas, and settlement payments. Because these cost forecasts may be updated throughout the year, DWR may submit a “Supplemental” Revenue Requirement to capture the cost changes to either recover increased costs or to return revenue to customers.

The costs outlined in the Revenue Requirement are ultimately recovered by DWR from payments made by customers and collected by IOUs on behalf of DWR.

The Revenue Requirement determination is produced at least once per year, typically between the months of June and September. Following a public comment period, DWR formally files the final determination with CPUC. CPUC, through a public comment process, then establishes power charges and bond charges sufficient to meet DWR’s revenue requirement pursuant to the rate agreement.

## Power and Related Costs:

- Costs associated with power supply to be delivered under the CERS’ priority long-term contracts
- Administrative and general expenses
- Extraordinary costs
- Operating reserves

## Power Charge Revenues:

- Revenues from other power sales
- Interest earnings
- Power Charge revenues (including both Power Charge revenues and Direct Access Power Charge revenues, as defined in the Bond Indenture)

## Bond Related Costs:

- Debt service on the bonds
- Changes to Bond Charge Account balances

## Bond Charge Revenues:

- Interest earned on Bond Charge Account balances
- Bond Charge Revenues

# Revenue Requirement – continued

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## 2009 Revenue Requirement

- CERS 2009 Revenue Requirement was released for public review and comment on August 6, 2008. CERS finalized its 2009 Revenue Requirement and submitted it to the CPUC on October 29th.
- Power charges required for 2009 are \$390 million higher than 2008 due to DWR's need to increase reserves after higher than forecast prices in the natural gas market during 2008 resulted in higher than expected costs for the year.
- CERS total Revenue Requirement for 2009 is \$4.410 billion consisting of \$3.551 billion for power charges and \$858 million for bond charges.
- Total costs for 2009 are approximately equal to the 2008 Revenue Requirement as natural gas prices declined in the fall and CERS natural gas price forecast used in estimating contract costs for 2009 are at similar levels to those used in its 2008 determination.
- The CPUC approved the 2009 Revenue Requirement during its December 18 meeting and implemented new rates on January 1, 2009.

DWR's revenue Requirement filings are available at [www.cers.water.ca.gov](http://www.cers.water.ca.gov).

# Bond Refunding Activities

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- In 2005, DWR refunded \$2.594 billion of the original 2002 Revenue Bonds and issued variable rate 2005 Series F and G bonds to lower interest costs.
- Due to credit rating downgrades to bond insurers whose credit ratings had been lowered to below AAA as a result of the subprime loan crisis, DWR began a refunding process in March 2008 to reduce risk exposure and lower interest costs. In March and April 2008, DWR refunded \$1.825 billion bonds Series C, D, and G bonds, issuing Series H, I, J and K bonds, thereby eliminating exposure to bond insurer's experiencing difficulty.
- In November DWR refunded \$173 million Series G variable rate bonds to fixed rate. The bonds had expiring credit facilities related to the bonds and DWR could not renew or replace the facilities due to the credit market turmoil negatively impacting many banks that provide credit facilities.
- In January 2009, subsequent to December 31, 2008, DWR refunded an additional \$350 million of Series F variable rate bonds to fixed rate due to expiring credit facilities that could not be renewed. The amount of bonds outstanding remained at \$9.525 billion after the transaction.

# Power Revenue Bonds

## December 31, 2008

(in millions)

Series	Initial Principal Amount	December 31, 2008 Outstanding Principal Amount	Interest Rate Mode
Initial Issues			
Series 2002A	\$ 6,314	\$ 2,826	Fixed
Series 2002B	1,000	1,000	Variable
Series 2002C	2,750	2,333	Variable
Series 2002D	500		
Series 2002E (Taxable)	700		
Total	\$ 11,264		
Refunding Issues			
Series 2005F	\$ 759	\$ 759	Variable
Series 2005G	1,835	841	Variable and Fixed
Series 2008H	1,007	1,007	Fixed
Series 2008I	150	150	Variable
Series 2008J	130	330	Variable
Series 2008K	279	279	Fixed
Total	\$ 4,160		
Total Bonds Outstanding		\$ 9,525	

# Cash Balances

## December 31, 2008

(in millions)

### Power Accounts

Operating and Priority Contract Accounts	\$	817
Operating Reserve Account		548
Total Power Account Balances	\$	<u>1,365</u>

### Bond Accounts

Bond Charge Collection Account	\$	268
Bond Charge Payment Account		647
Debt Service Reserve Account		921
Total Bond Account Balances	\$	<u>1,836</u>

**Note:** All cash balances met the requirements of the Bond Indenture at quarter end and for each day during the quarter.

# Revenues from IOU Ratepayers

## Year Ended December 31, 2008

(in millions)

	<b>Pacific Gas &amp; Electric</b>	<b>San Diego Gas &amp; Electric</b>	<b>Southern California Edison</b>	<b>Total</b>
<b><u>Power Charges</u></b>				
Quarter Ended March 31, 2008	\$ 299	\$ 135	\$ 490	\$ 924
Quarter Ended June 30, 2008	173	131	446	750
Quarter Ended September 30, 2008	264	117	451	832
Quarter Ended December 31, 2008	255	103	504	862
<b>Total Power Charges 2008</b>	<b>\$ 991</b>	<b>\$ 486</b>	<b>\$ 1,891</b>	<b>\$ 3,368</b>
<b><u>Bond Charges</u></b>				
Quarter Ended March 31, 2008	\$ 94	\$ 22	\$ 95	\$ 211
Quarter Ended June 30, 2008	85	20	92	197
Quarter Ended September 30, 2008	113	23	110	246
Quarter Ended December 31, 2008	102	22	104	228
<b>Total Bond Charges 2008</b>	<b>\$ 394</b>	<b>\$ 87</b>	<b>\$ 401</b>	<b>\$ 882</b>

# DWR Contract Expenditures for the Benefit of Ratepayers

## Year Ended December 31, 2008 (in millions)

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<u>Utility</u>	<u>Total Power Costs</u>	<u>Total MWh</u>	<u>Total Gas Costs</u>	<u>Total MMBtu</u>
<b>Pacific Gas &amp; Electric</b>				
Quarter Ended March 31, 2008	\$ 342	4.38	\$ 5	1.44
Quarter Ended June 30, 2008	209	3.01	7	1.99
Quarter Ended September 30, 2008	341	3.83	25	4.50
Quarter Ended December 31, 2008	272	3.55	42	1.70
<b>Southern California Edison</b>				
Quarter Ended March 31, 2008	309	6.92	242	33.19
Quarter Ended June 30, 2008	307	6.74	264	29.83
Quarter Ended September 30, 2008	318	6.71	322	35.40
Quarter Ended December 31, 2008	282	7.43	225	33.86
<b>San Diego Gas &amp; Electric</b>				
Quarter Ended March 31, 2008	64	1.68	54	8.61
Quarter Ended June 30, 2008	42	1.50	64	7.58
Quarter Ended September 30, 2008	109	1.08	66	7.92
Quarter Ended December 31, 2008	67	1.09	12	5.03
<b>Total 2008</b>	<b>\$ 2,662</b>	<b>47.92</b>	<b>\$ 1,328</b>	<b>171.05</b>

# Appropriated Costs

## Six Months Ended December 31, 2008

(in millions)

	Annual Budget for Fiscal Year Ended June 30, 2009	Pro rated Budget for six months Ended December 31, 2008	Actual Expenditures through December 31, 2008
Salaries, Benefits and Distributed Administrative Costs	\$8.7	\$4.4	\$3.8
Consulting Companies and Personal Service Consultants	8.4	4.2	3.9
Other Operating Expenses and Equipment	0.5	0.3	0.3
Subtotal	17.6	8.8	8.0
Allocation of State Wide Pro-Rata Costs	8.6	4.3	4.3
<b>TOTAL ADMINISTRATIVE COSTS</b>	<b>\$26.2</b>	<b>\$13.1</b>	<b>\$12.3</b>