
California Department of Water Resources

Bank Meeting

Power Supply Revenue Bond Update



June 30, 2010



Participants

- Russell Mills, Department of Water Resources, Financial Management
- Jeanne Trujillo, California State Treasurer's Office
- Doug Montague, Montague DeRose and Associates, LLC
- James Bemis, Montague DeRose and Associates, LLC
- Frank Perdue, Montague DeRose and Associates, LLC
- Kreg McCollum, Navigant Consulting
- Bruce Van Dusen, Hawkins Delafield & Wood LLP
- Stan Dirks, Orrick, Herrington & Sutcliffe LLP
- Tim Self, JPMorgan Chase



Agenda

- I. Meeting Objective
- II. Background
- III. 2011 Revenue Requirement
- IV. Adequacy of Reserves
- V. Gas Price Update
- VI. Power Supply Contracts
- VII. Bond Summary
- VIII. Legislative and Regulatory Update
- IX. Summary



I. Meeting Objective



Meeting Objective

- In May 2010, the Department restructured a significant piece of its variable rate portfolio
 - \$2.679 billion of variable rate debt was restructured with fixed rate bonds
 - \$2.005 billion of variable rate debt is currently outstanding
- Approximately \$1.344 billion in letters of credit and liquidity facilities in connection with the Department's remaining variable rate debt expire by December 2010, with the balance expiring in 2011 and 2012
- **In July 2010, the Department will be soliciting proposals and bids for replacement letter of credit facilities for the facilities expiring in 2010**



II. Background



California's 2000-01 Energy Crisis

- California deregulated its energy markets in 1996; but provided for a transition period in which IOU rates continued to be frozen
- The supply and demand relationship for electricity in California became out of balance, as supply barely increased (1,196 MW in new generation from 1996-2000) while demand rose steadily (6,573 MW rise in peak demand from 1996-2000)
- As revenues became insufficient to cover utilities' rising power costs, IOUs' credit quality fell below investment grade, and generators and fuel suppliers would not sell to utilities
- The State of California stepped in and, through legislation enacted in January 2001 (AB1X), made the Department of Water Resources the buyer of last resort for the State's energy needs
- Before AB1X, DWR actively traded energy in California's energy markets, and as owner/operator of State Water Project, DWR is the single largest user of electricity in California
- California Energy Resources Scheduling was established in 2001 to manage DWR's responsibilities under AB1X



Summary of AB 1X

- Passed in January 2001 to implement the State's strategy to stabilize power markets
- Authorized DWR to negotiate and enter into long-term power supply contracts with independent producers
- Authorized issuance of revenue bonds to fund power purchases and to cover the State's revenue shortfalls in the market until prices stabilize
- Authorized DWR to impose a Revenue Requirement sufficient to cover debt service on the bonds and payments under DWR's power purchase and fuel purchase agreements
- CPUC was authorized to set retail rates to allocate DWR's revenue requirement and to enter into a Rate Agreement relating to DWR's power purchase program
- DWR retains title to all power sold and all associated revenues, but was authorized to enter into service agreements with the IOUs for distribution and billing services
- DWR can collect power charges as long as it is providing power and bond charges as long as bonds are outstanding

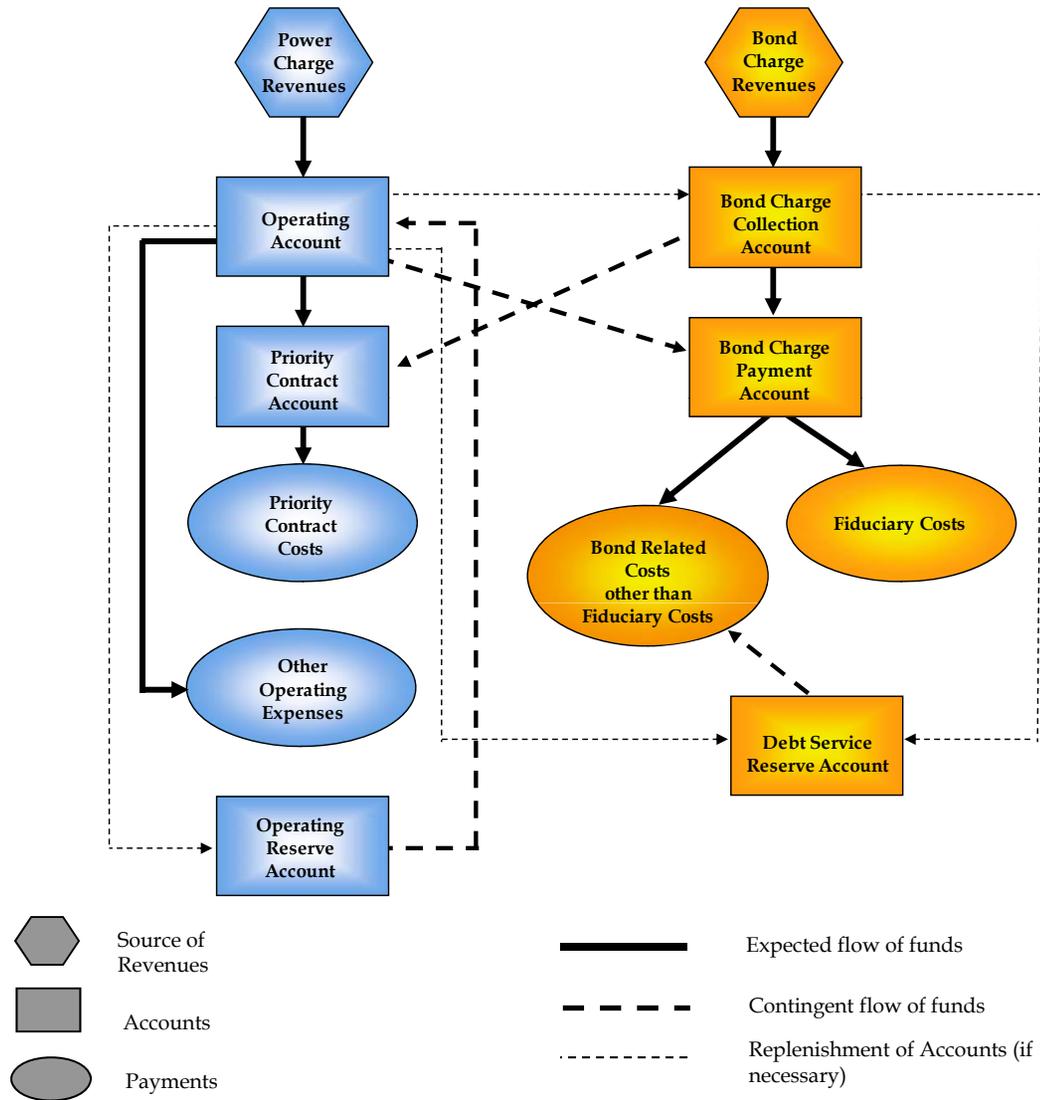


Description of Key Rate Agreement Provisions

- Agreement to set charges to facilitate cost recovery
- Consistent with priority provisions of long-term power contracts
- Establishes separate Power Charges and Bond Charges
- Power Charges are based on DWR power delivered
- Bond Charges are based on all power delivered to customers in the IOU service area (even after DWR is no longer delivering power)
- CPUC Covenants:
 - Irrevocably to impose Bond Charges sufficient to provide for the timely payment of debt service and other bond related costs (including prefunding of bond accounts), whether or not DWR files a revenue requirement
 - To impose Power Charges sufficient to satisfy DWR “retail revenue requirements” for power, fuel and related costs
 - To impose charges within no greater than 120 days of delivery of a revenue requirement filing



Flow of Revenues under the Indenture

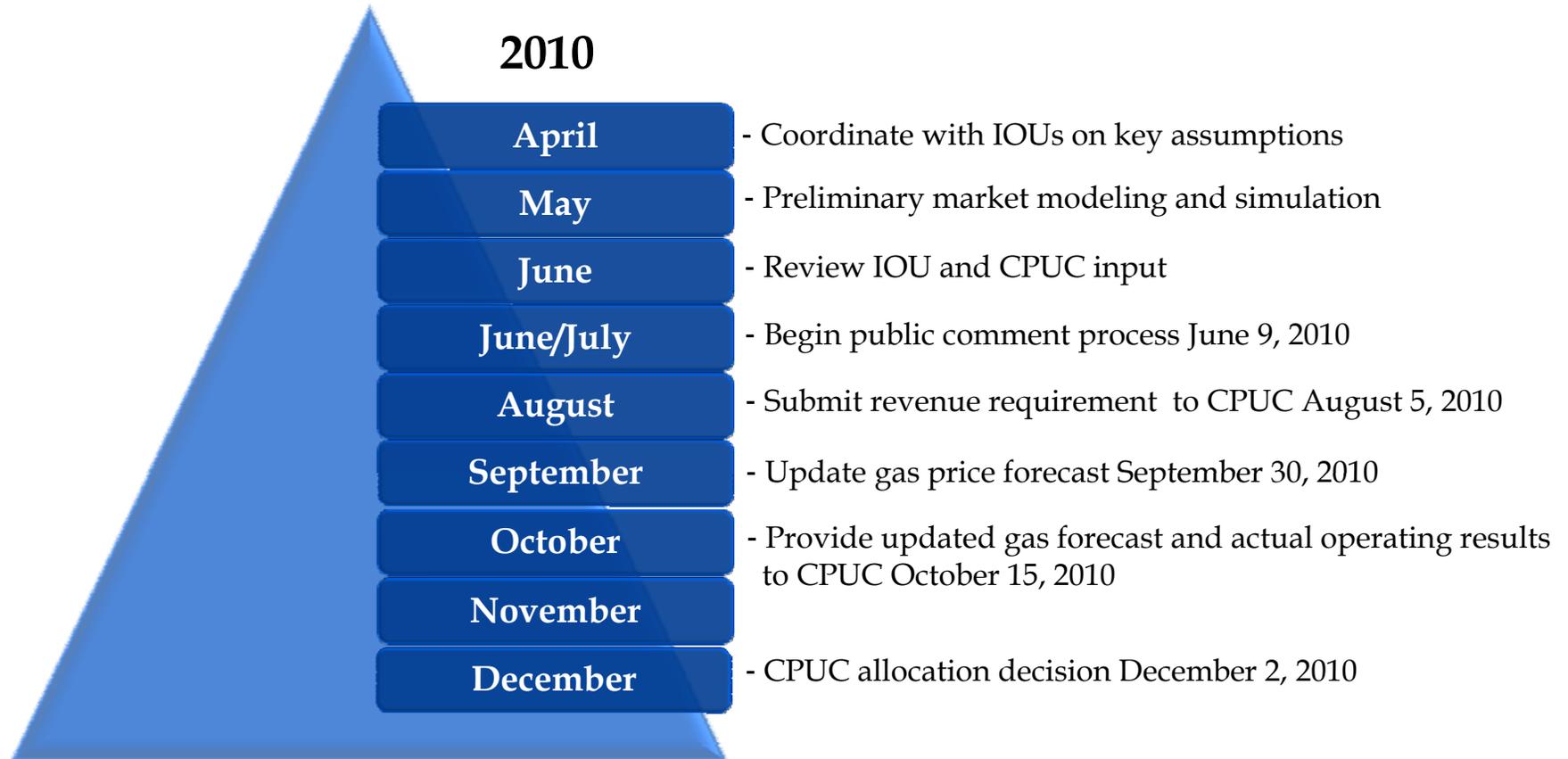




III. 2011 Revenue Requirement



2011 Revenue Requirement Process – Anticipated Schedule





Power Charge Revenue Requirement

- On the basis of actual results to date and adjusted projections, the Department projects that it will end 2010 with approximately \$60 million more in the Operating Account than projected in the 2010 Revenue Requirement, primarily due to lower gas prices
- Two factors explain the \$936 million decrease in power costs from 2010 to 2011:
 - Gas prices are projected to average about \$1/MMBtu less in 2011 compared to 2010
 - A number of large power supply contracts expire at the end of 2010 and during 2011
- Power charges averaged \$89/MWh in 2009, \$60/MWh in 2010 and are projected to average \$34/MWh in 2011

Summary of Retail Power Revenue Requirements			
\$ millions			
Description	2011	2010	Difference
Sources of Funds			
Revenue from Customers	\$904	\$2,126	(\$1,222)
Off System Sales and Other Revenue	0	0	0
Interest	6	13	(6)
Total Sources to Service Costs ¹	\$910	\$2,139	(\$1,228)
Uses of Funds			
Power Costs	\$1,872	\$2,809	(\$936)
General and Administrative Expenses	27	27	(0)
Change in Operating Balances	(989)	(698)	(291)
Total Uses of Funds ¹	\$910	\$2,139	(\$1,228)

¹May not match due to rounding.



Bond Charge Revenue Requirement

- The 2011 Revenue Requirement projects interest rates for its unhedged variable rate bonds at 4.423% compared to 5.713% that was projected in the 2010 Revenue Requirement
- Bond charge revenue receipts continue to track projections given the low variance in total load
- Bond charges averaged \$4.91/MWh in 2009, \$5.15/MWh in 2010 and are projected to average \$5.15/MWh in 2011

Summary of Retail Bond Revenue Requirements			
\$ millions			
Description	2011	2010	Difference
Sources of Funds			
Revenue from Customers	\$889	\$896	(\$8)
Interest	22	26	(4)
Total Sources to Service Costs ¹	\$911	\$923	(\$11)
Uses of Funds			
Debt Service	\$919	\$951	(\$32)
Change in Bond Account Balances	(7)	(28)	21
Total Uses of Funds ¹	\$911	\$923	(\$11)

¹May not match due to rounding.



IV. Adequacy of Reserves



Stress Cases Used to Evaluate the Adequacy of Reserves

- The Sensitivity Cases evaluated are consistent with stressors used in the 2005 through 2010 Filings
- Case 1 - Reduced Demand Sensitivity
 - Increased natural gas prices (three standard deviations from base case levels)
 - Reduced customer demand and energy requirements
 - Increased hydroelectric production due to higher than normal precipitation
- Case 2 - Increased Demand Sensitivity
 - Increased natural gas prices (three standard deviations from base case levels)
 - Increased customer demand and energy requirements
 - Reduced hydroelectric production due to lower than normal precipitation
 - Large unscheduled outages of base load IOU resources



Revenue Requirement Reserve Summary - Power

- The Department plans to exceed the target minimum reserve level of \$177 million in its Operating Account at all times during 2011
- The required Operating Reserve amount of \$364 million is projected to be met at all times during 2010
- Reserves are adequately sized to address fuel procurement risks
- The projected 2011 ending operating balances exceed the remaining projected operating costs

Summary of Revenue Requirements Reserve Levels

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Operating Account										
Indenture Target Minimum	\$348	\$296	\$275	\$371	\$318	\$337	\$331	\$190	\$177	\$50
Amount Above Target	-	133	270	-	282	323	200	260	-	94
Total Operating Account	\$348	\$429	\$545	\$371	\$600	\$660	\$531	\$450	\$177	\$144
Operating Reserve										
Operating Reserve	\$630	\$595	\$555	\$591	\$612	\$548	\$543	\$549	\$364	\$38
Total Operating Reserves	\$978	\$1,024	\$1,100	\$962	\$1,212	\$1,208	\$1,074	\$999	\$541	\$182

Actual through March 2010; projected April 2010 through 2012



Revenue Requirement Reserve Summary - Bond

- The Department plans to exceed the target minimum level in its Bond Accounts by \$75 million at all times during 2011
- The required Debt Service Reserve amount of \$948 million is met at all times during 2011
- The Bond Charge Payment Account minimum (3 months accrued and unpaid debt service) and the Bond Charge Collection Account minimum (1 month accrued and unpaid debt service) along with the Debt Service Reserve Account provides 16 months of debt service coverage

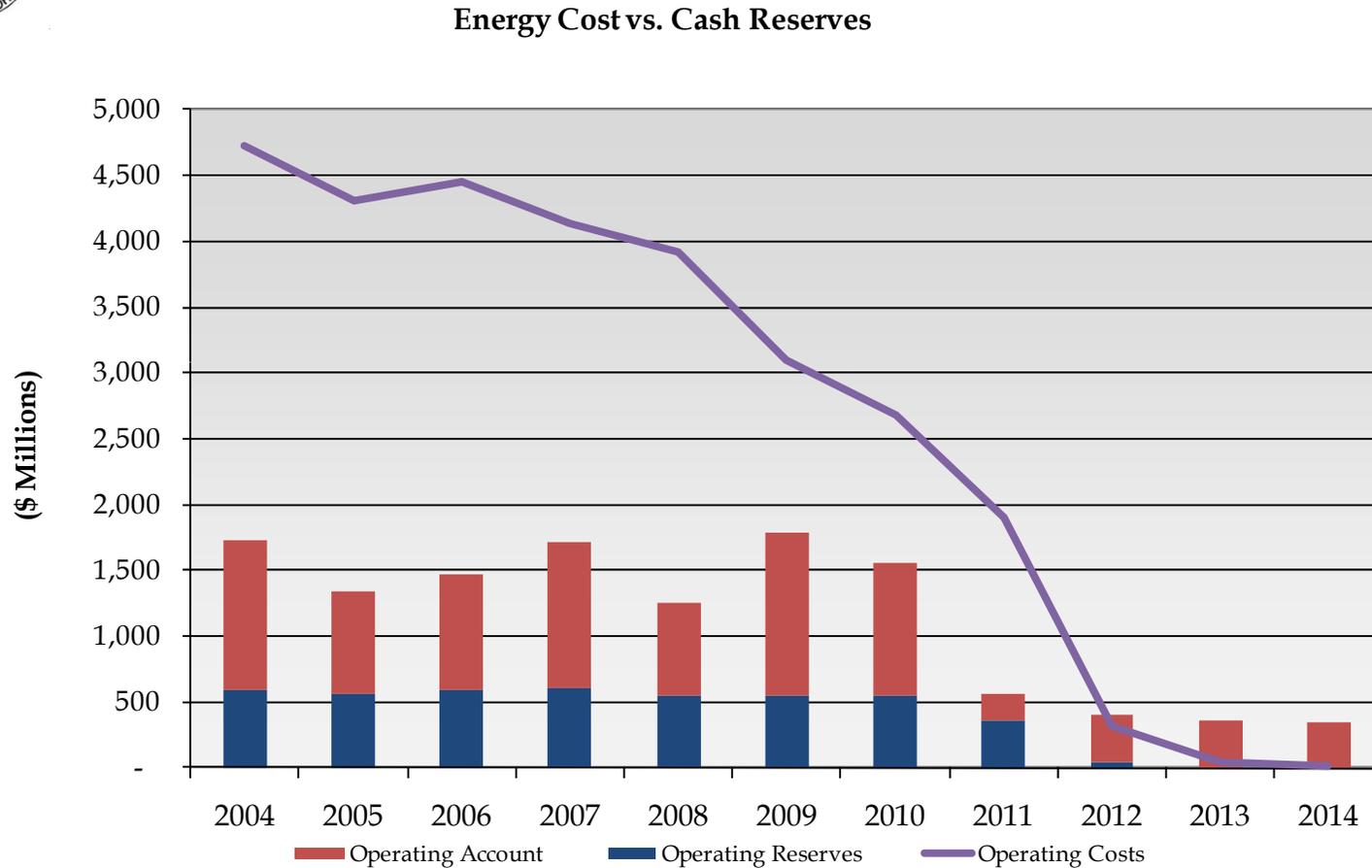
Summary of Revenue Requirements Bond Reserve Levels

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Bond Charge Collection Account										
Indenture Target Minimum	\$41 - \$76	\$75 - \$78	\$76 - \$78	\$75 - \$80	\$76 - \$78	\$78 - \$80	\$78 - \$80	\$79 - \$81	\$77 - \$89	\$59 - \$80
Amount Above Target	36	37	82	92	46	94	78	96	78	63
Total BCC Amount	77-112	111-114	158-160	166-171	121-123	171-173	156-158	174-176	155-167	122-143
Bond Charge Payment Account										
Bond Charge Payment Account	\$140 - \$442	\$300 - \$702	\$237 - \$834	\$228 - \$835	\$318 - \$810	\$324 - \$825	\$328 - \$873	\$330 - \$905	\$405 - \$875	\$361 - \$775
Debt Service Reserve										
Debt Service Reserve	927	927	927	913	930	937	950	959	940	948
Total Bond Reserves										
Total Bond Reserves	1144-1481	1338-1743	1322-1921	1307-1919	1369-1863	1432-1935	1434-1981	1463-2040	1500-1982	1424-1859

Actual through March 2010; projected April 2010 through 2012



Energy Costs and Cash Reserves



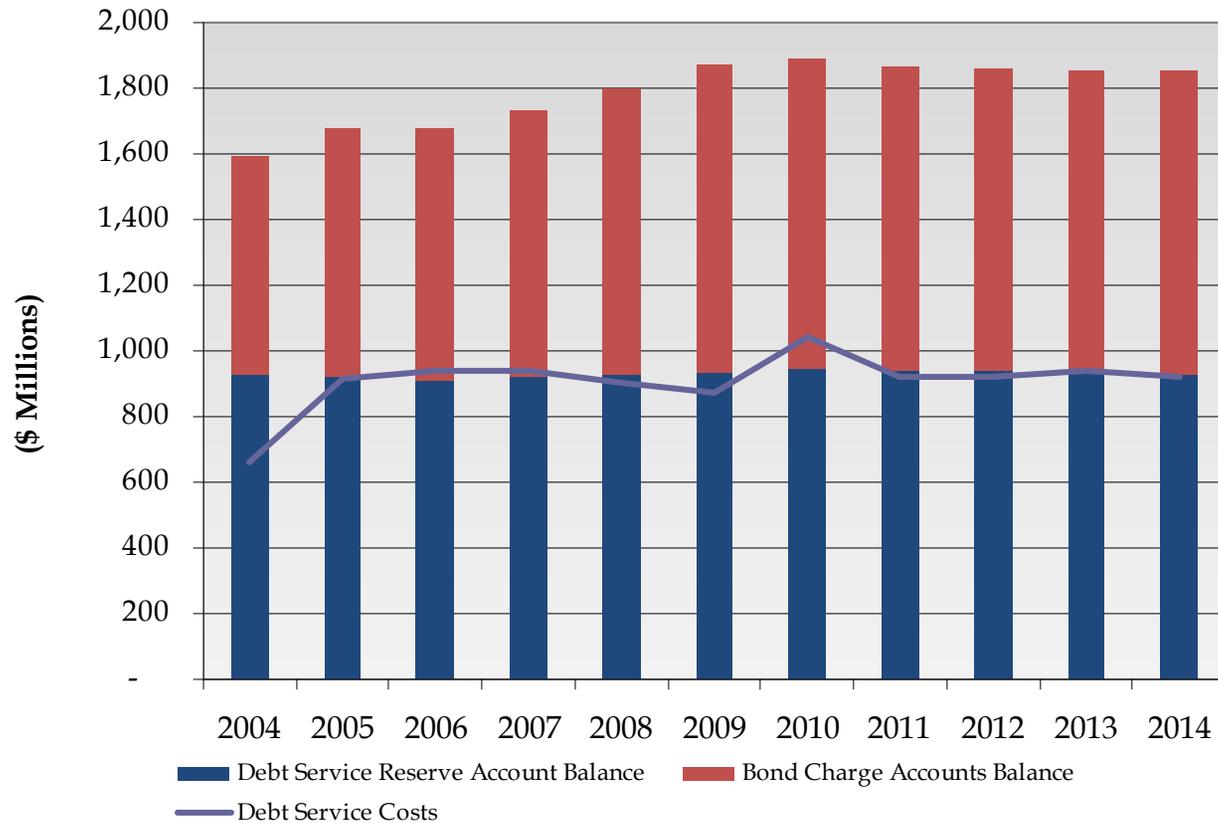
The ratio of projected operating reserves to projected energy costs is 0.63% in 2010, 0.51% in 2011 and 100% in 2012

Note: All projections assume annual calculation of revenue requirements in accordance with current practices.
Actual through March 2010; projected April 2010 through 2014



Debt Service and Cash Reserves

Bond Costs vs. Cash Reserves

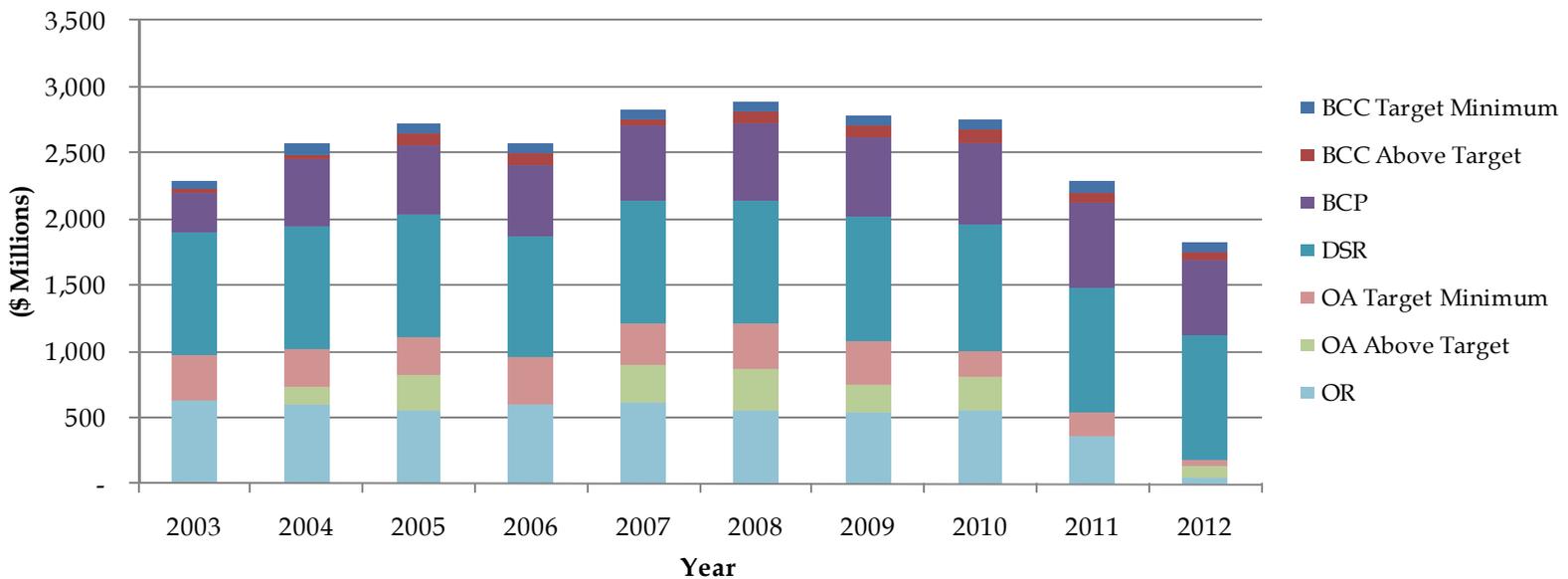


Note: Operating Account Balances are the average for the year.
Actual through March 2010; projected April 2010 through 2014



DWR's Combined Reserve Summary

- The Department's aggregate reserves were over \$2.7 billion at all times in 2010
- Projected reserves are more than adequate relative to DWR's costs and ongoing risk profile



Actual through March 2010; projected April 2010 through 2012



V. *Gas Price Update*



How DWR Uses Gas Prices

- DWR uses a monthly gas price forecast for three primary purposes in determining its revenue requirement
 - Prices are a significant factor for the production simulation analysis that dispatches all resources across the western electricity grid and determines cost of projected DWR contract dispatch
 - Prices are used to adjust expected DWR contract costs for the remainder of 2010 potentially altering the expected fund balances at the beginning of 2011
 - Prices are used to adjust costs related to the mark-to-market of ISDA contracts and financial positions
- DWR uses monthly prices that are based on a 10-day average of NYMEX futures contract prices through June of the year following the revenue requirement period (e.g. June 2012 for the 2011 revenue requirement)
- In the spring of each year, DWR prepares a gas price forecast that is provided to the IOUs for initial review
- DWR updates its forecast of gas prices at the end of September each year



Current Gas Price Projections

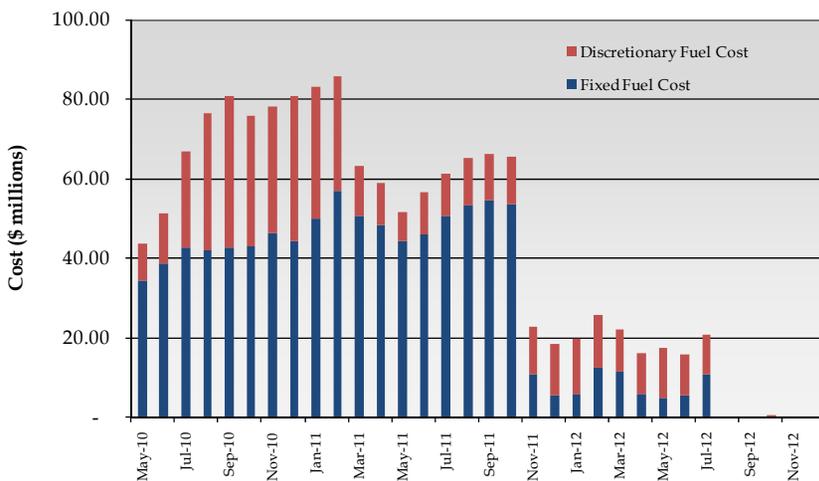
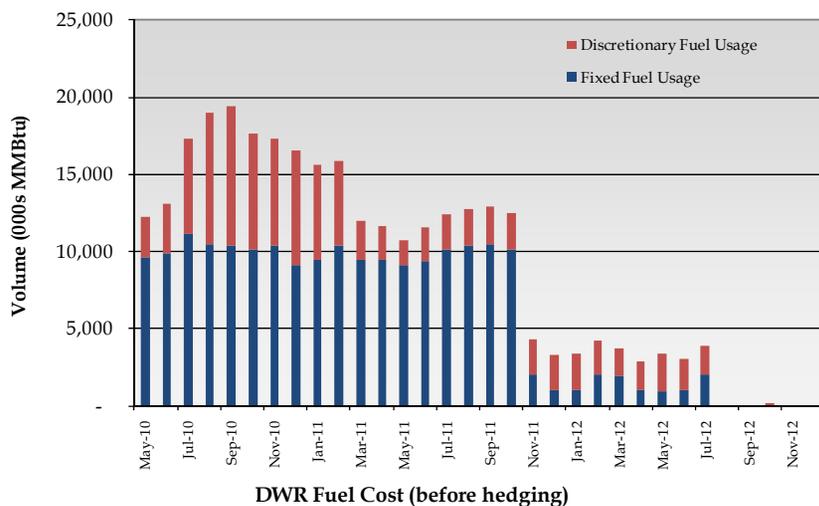
- 2011 gas prices are \$0.97/MMBtu lower than those projected in the 2010 Revenue Requirement
- The beneficial effects of lower actual gas prices for 2010 result in higher than projected fund balances

Period	<u>2010 Revenue Requirement Forecast</u>			<u>2011 Revenue Requirement Forecast</u>			<u>Difference</u>		
	Henry Hub	Southern California Border	PG&E CityGate	Henry Hub	Southern California Border	PG&E CityGate	Henry Hub	Southern California Border	PG&E CityGate
	\$/MMBtu	\$/MMBtu	\$/MMBtu	\$/MMBtu	\$/MMBtu	\$/MMBtu	\$/MMBtu	\$/MMBtu	\$/MMBtu
2011	\$6.46	\$6.19	\$6.31	\$5.49	\$5.31	\$5.76	\$0.97	\$0.88	\$0.55
2012	\$5.36	\$5.14	\$5.19	\$5.69	\$5.66	\$6.00	(\$0.33)	(\$0.53)	(\$0.81)



Fuel Summary

DWR Fuel Requirement



Actual through March 2010; projected April 2010 through 2012

- For calendar year 2010, the IOUs have collectively secured or developed reasonably firm plans to secure hedges on behalf of DWR that establish the effective price for over 147 million MMBtu
- The hedged volume represents approximately 71% of total projected base case gas requirements for DWR's power contracts
- The IOUs are expected to hedge a similar percentage of DWR's fuel requirements for the 2011 and 2012 Revenue Requirement Periods
- After the expiration of the Sempra Contract (September 2011), the Department's exposure to fuel price risk diminishes significantly



VI. Power Supply Contracts



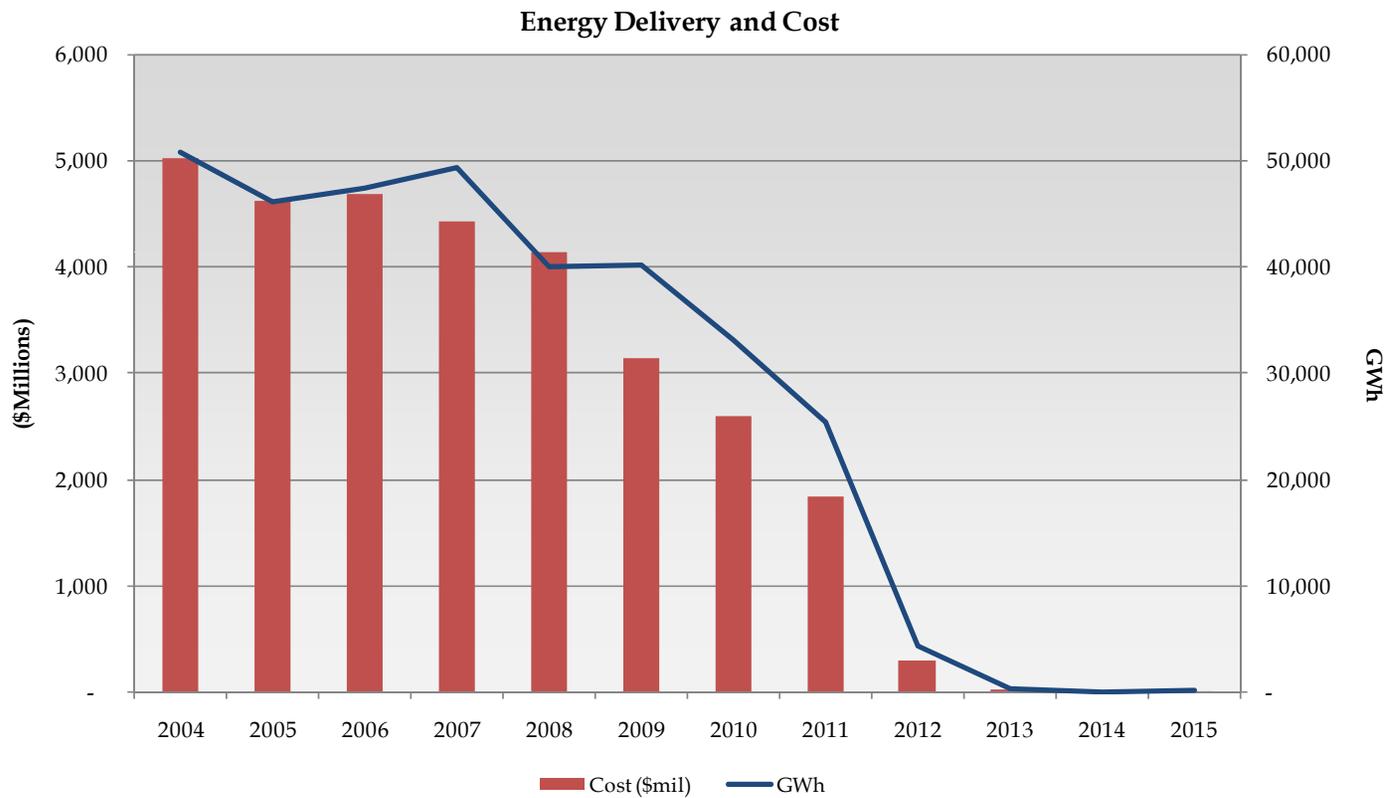
Long-Term Power Supply Contract Summary

Contract	Type	Fuel Tolling	Origin of Deliveries	2010	2011	2012	2013	2014	2015
Capacity (MW)									
Calpeak	Dispatchable	Yes	Generator-specific	260	260	-	-	-	-
Calpine 1	Must-take	No	Market	-	-	-	-	-	-
Calpine 2	Must-take	No	Market	180	180	180	-	-	-
Calpine 3	Dispatchable	Yes	Generator-specific	495	495	-	-	-	-
Colton	Dispatchable	Yes	Generator-specific	80	-	-	-	-	-
Coral	Must-take	Yes	Market	925	595	595	-	-	-
Power Receivables Finance	Must-take	No	Market	800	800	-	-	-	-
GWF	Dispatchable	Yes	Generator-specific	362	362	171	-	-	-
High Desert	Dispatchable	Yes	Generator-specific	840	840	-	-	-	-
Kings River	Dispatchable	Yes	Generator-specific	96	96	96	96	96	96
Iberdrola Renewables	Dispatchable	Yes	Market	300	300	-	-	-	-
PG&E Energy Trading-wind	As-Avail	No	Generator-specific	30	30	-	-	-	-
Sempra	Must-take	Yes	Market	1,600	1,600	-	-	-	-
Sunrise	Dispatchable	Yes	Generator-specific	581	581	581	-	-	-
Wellhead	Dispatchable	Yes	Generator-specific	118	118	-	-	-	-
JPM Energy ABC	Must-take	No	Market	325	-	-	-	-	-
JPM Energy D	Dispatchable	Yes	Generator-specific	1,045	-	-	-	-	-
Shell Cabazon	Wind	No	Generator-specific	29	29	29	30	-	-
Shell Whitewater-wind	As-Avail	No	Generator-specific	44	44	45	45	-	-
Total Capacity¹				8,109	6,329	1,697	171	96	96

1. Average Summer Peaking Capacity



Energy Deliveries and Costs, 2004 - 2015



Actual through March 2010; projected April 2010 through 2015



VII. Bond Summary



Power Bond Credit Ratings History

- The Power Bonds have received numerous credit rating upgrades since 2002:

Ratings History for DWR's Power Supply Revenue Bonds			
Date	Moody's	S&P	Fitch
Current	Aa3	AA-	AA-
2008	Aa3	A+	A+
2007	Aa3	A	A
2006	A1	A-	A
2005	A2	BBB+	A
2004	A2	BBB+	A-
2003	A3	BBB+	A-
2002	A3	BBB+	A-



Power Bond Summary

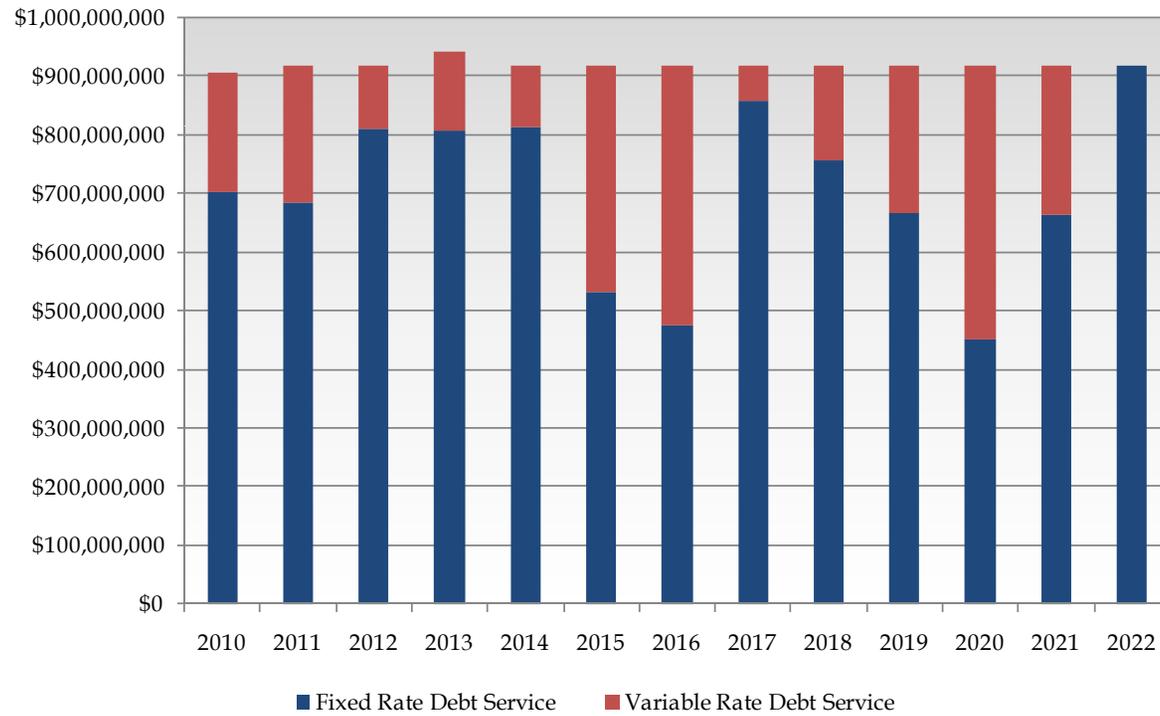
- In May 2010, the Department issued an aggregate principal amount of over \$2.9 billion for purposes of:
 - Reducing DWR's exposure to market uncertainties and expenses related to variable rate debt
 - Achieving debt service savings by the issuance of fixed rate refunding bonds for the purpose of refunding a portion of its outstanding fixed rate bonds
 - The resulting portfolio is shown below:

Power Bond Portfolio Summary			
Description	Fixed Rate	Variable Rate	Total
Series A	\$1,590,195,000	-	\$1,590,195,000
Series B	-	30,000,000	30,000,000
Series C	-	1,346,200,000	1,346,200,000
Series F	348,130,000	-	348,130,000
Series G	173,000,000	410,300,000	583,300,000
Series H	1,006,510,000	-	1,006,510,000
Series I	-	-	-
Series J	-	218,500,000	218,500,000
Series K	279,250,000	-	279,250,000
Series L	2,992,540,000	-	2,992,540,000
	<u>\$6,389,625,000</u>	<u>\$2,005,000,000</u>	<u>\$8,394,625,000</u>



Power Bond Summary

California Department of Water Resources - Power Revenue Bonds Outstanding Debt Service





Power Bond Summary, Continued

- The Department currently has \$6.4 billion of fixed rate bonds outstanding, \$1.05 billion of hedged variable rate bonds outstanding and \$952 million of unhedged variable rate bonds outstanding
- The projected average interest rate for all fixed rate bonds for the 2011 Revenue Requirement Period is 4.948%
- The projected average interest rate for all hedged variable rate bonds (taking into account the hedges) is 4.060%
- For the 2011 Revenue Requirement Period, on the basis of the calculation requirements in the indenture, the projected interest rate on unhedged variable rate bonds is 4.423%

Portfolio Details	
Description	Total
Fixed Rate Bonds	\$6,389,625,000
Variable Rate Bonds	2,005,000,000
Bonds	\$8,394,625,000
SIFMA Swaps	\$151,900,000
LIBOR Swaps	901,000,000
Swaps	\$1,052,900,000
Hedged VRDO Bonds	\$1,052,900,000
Unhedged VRDO Bonds	\$952,100,000
% of Debt Not Fixed or Hedged	11.342%



Near-Term Debt Restructuring Plans

- DWR has \$1.34 billion of bank facilities scheduled to expire by December 1, 2010
- DWR is considering selected renewals of credit enhancement facilities and possible fixed-rate bond issuances to take out additional portions of its variable rate bonds if credit enhancement facilities are not renewed

INSTITUTION	FORM OF CREDIT	SERIES	PAR AMOUNT (000s)	EXPIRATION DATE
Bank of New York	LOC	2002B-1	\$ 3,750	11/30/2010
CalSTRS	LOC	2002B-1	\$ 1,250	11/30/2010
State Street Bank	LOC	2002B-6	\$ 25,000	11/30/2010
Dexia Credit, NY	LOC	2002C-1	\$ 233,000	11/30/2010
Landesbank HTG	LOC	2002C-10	\$ 15,400	11/30/2010
Bank of Nova Scotia	LOC	2002C-11	\$ 25,000	11/30/2010
KBC	LOC	2002C-11	\$ 75,000	11/30/2010
West LB AG	LOC	2002C-14	\$ 87,100	11/30/2010
Bank of New York	LOC	2002C-17	\$ 25,000	11/30/2010
CalSTRS	LOC	2002C-4	\$ 61,725	11/30/2010
JP Morgan Chase	LOC	2002C-4	\$ 185,175	11/30/2010
Dexia Credit, NY	LOC	2002C-5	\$ 50,000	11/30/2010
Bayerische LB	LOC	2002C-8	\$ 123,800	11/30/2010
Citibank	LOC	2002C-9	\$ 122,400	11/30/2010
Bank of Nova Scotia	LOC	2005G-1	\$ 16,800	12/1/2010

INSTITUTION	FORM OF CREDIT	SERIES	PAR AMOUNT (000s)	EXPIRATION DATE
Lloyds TSB Bank	LOC	2005G-2	\$ 6,200	12/1/2010
Bank of Nova Scotia	Liq Agrmt	2005G-5	\$ 50,000	12/1/2010
Fortis Bank	Liq Agrmt	2005G-5	\$ 150,000	12/1/2010
Calyon	Liq Agrmt	2005G-6	\$ 58,491	12/1/2010
Societe Generale	Liq Agrmt	2005G-6	\$ 28,809	12/1/2010
CALPERS	LOC	2008J-1	\$ 5,891	4/15/2011
JP Morgan Chase	LOC	2008J-1	\$ 19,610	4/15/2011
Bank of Nova Scotia	LOC	2008J-2	\$ 48,250	4/15/2011
CALPERS	LOC	2008J-2	\$ 48,250	4/15/2011
JP Morgan Chase	LOC	2008J-2	\$ 96,500	4/15/2011
Dexia Credit, NY	Liq Agrmt	2002C-13	\$ 31,933	11/30/2012
Dexia Credit, Paris	Liq Agrmt	2002C-13	\$ 63,867	11/30/2012
Dexia Credit, NY	Liq Agrmt	2002C-7	\$ 82,267	11/30/2012
Dexia Credit, Paris	Liq Agrmt	2002C-7	\$ 164,533	11/30/2012
JP Morgan Chase	LOC	2005G-3	\$ 100,000	12/1/2012



Swap Portfolio Summary (5-31-10)

- Aggregate negative mark-to-market value of about \$78 million
 - 7.45% of outstanding swap notional
 - 0.93% of total outstanding Power Bond debt
- If the Department were to terminate the swaps it has alternatives to pay for any potential unwind costs
 - Bond fund termination payments
 - Cash fund termination payments with any excess amounts in Bond Charge Accounts
 - DWR also has right to pay any unwind payments in 11 equal quarterly installments, rather than in lump sum
- Lower interest rates on fixed-rate take-out bonds compared to all-in synthetic fixed rate bond costs would offset to some degree increase in debt required to fund the unwind payments

Swap Portfolio Summary										
Swap Name	Counterparty	Outstanding Balance	Maturity	Call Date	Current MTM	Prior Q MTM	Change MTM	Fixed Leg	Floating Leg 1 %	Floating Index 1
2002 Libor 3	Bayerische Landesbank	\$174,200,000	5/1/2015	n/a	(\$14,621,618)	(\$15,984,980)	\$1,363,362	3.2800%	67.0000%	1M Libor
2002 SIFMA 1	JP Morgan Chase	92,089,000	5/1/2013	n/a	(3,169,641)	(5,267,763)	2,098,122	3.4050%	100.0000%	SIFMA
2002 SIFMA 2	Morgan Stanley	46,044,000	5/1/2013	n/a	(1,584,824)	(2,633,892)	1,049,068	3.4050%	100.0000%	SIFMA
2002 SIFMA 3	Merrill Lynch	13,767,000	5/1/2013	n/a	(473,862)	(787,527)	313,665	3.4050%	100.0000%	SIFMA
2005 Libor 1	Depfa Bank	241,500,000	5/1/2015	n/a	(16,753,655)	(19,372,180)	2,618,525	3.1840%	66.5000%	1M Libor
2005 Libor 2	BNP Paribas	485,300,000	5/1/2016	n/a	(41,833,123)	(43,760,318)	1,927,195	3.2277%	66.5000%	1M Libor
		\$1,052,900,000			(\$78,436,723)	(\$87,806,660)	\$9,369,937			



VIII. *Legislative and Regulatory Update*



Summary of Senate Bill 695

- SB 695 was enacted to avoid a significant one-time rate increase on residential baseline customers – baseline residential customers have been exempted from rate increases since 2001 - until the Department had recovered the cost of power purchased on behalf of its customers
- Allows the PUC to increase residential customer rates for usage up to 130% baseline quantities by the annual percentage change in the CPI from the prior year plus 1% (not less than 3% and not more than 5% per year)
- Allows the CPUC to allocate the Department's and the IOUs' revenue requirements so that cost increases since the beginning of 2001 are spread over a larger customer base
- SB 695 authorizes a limited opening – up to a maximum allowable limit – of direct access for nonresidential end-use customers that commences immediately and will phase in over a period of three to five years, subject to a total energy (kWh) limit
- If the maximum allowable limit of direct access load is reached in all three service areas, the total percentage of IOU retail load attributable to direct access customers would increase from 9.3% to approximately 14.1%



IX. Summary



Strengths of the Power Bond Credit

- This is a strong and stable credit with future improvement anticipated
- Revenue stream is based on sales of an essential commodity
- Broadest customer base (11.3 million accounts) of any power revenue bond credit in the country
- Eight years of perfect compliance with all bond-related covenants including the timely formulation of revenue requirements and prompt rate setting by the CPUC
- Implementation of customer rate increases when necessary
- Substantial operating and debt service reserve balances
- Substantially all power-side risk exposure will be gone by the beginning of 2012
- Minimal risk of tapping bond charge accounts for power costs is diminishing further
- Restructuring of bond and swap portfolio has reduced interest rate and counterparty risks



Schedule

Activity	Date
Bank meeting	June 30 th
Release bank RFP	July 9 th
Bank bids due	July 30 th
Closing of amendments to Master Bank Agreement	Autumn 2010



Contact Information

Participant Contact Information	Phone Number	Email Address
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