

State of California

Department of Water Resources

Revised Determination of Revenue Requirement

For the Period

January 1, 2017 through December 31, 2017

Transmitted To

The California Public Utilities Commission

Pursuant To

Sections 80110 and 80134 of the California Water Code



October 21, 2016

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A. THE DETERMINATION

GENERAL

Pursuant to Section 80110 of the California Water Code, the Department hereby issues its Revised Determination of Revenue Requirement for the period of January 1, 2017 through December 31, 2017 (“2017 Determination”) in accordance with the Rate Agreement between the State of California Department of Water Resources (“Department” or “DWR”) and the California Public Utilities Commission (“Commission” or “CPUC”), dated March 8, 2002 (“Rate Agreement”), and Division 23, Chapter 4, Sections 510–517 of the California Code of Regulations (“Regulations”). Capitalized terms used and not otherwise defined herein have the meanings given to such terms in the Rate Agreement or the Indenture under which the Department’s Power Supply Revenue Bonds were issued (the “Bond Indenture”).

The costs of the Department’s purchases to meet the net short requirements of retail end use customers in the three California investor-owned utilities’ (“Utilities” or “IOUs”) service territories, including the costs of administering the long-term contracts, are to be recovered from payments made by customers and collected by the IOUs on behalf of the Department. The terms and conditions for the recovery of the Department’s costs from customers are set forth in the California Water Code (“Act”), the Regulations, the Rate Agreement and orders of the Commission. Among other things, the Rate Agreement defines a “Bond Charge” designed to recover the Department’s costs associated with its bond financing activity (“Bond Related Costs”) and a “Power Charge” designed to recover “Department Costs”, or the Department’s “Retail Revenue Requirement” including power supply-related costs. Subject to the conditions described in the Rate Agreement and other Commission Decisions, Bond Charges and certain charges designed to recover Department Costs may also be imposed on the customers of Electric Service Providers (as that term is defined in the Rate Agreement).¹ Additional background material is contained in the Department’s prior Determinations of Revenue Requirement, copies of which have been incorporated into the administrative record supporting this 2017 Determination.

Pursuant to Sections 80110 and 80134 of the California Water Code and the Rate Agreement, this Determination contains information on the amounts required to be recovered, on a cash basis, in the 2017 Revenue Requirement Period (calendar year 2017).

For the 2017 Revenue Requirement Period, this Determination contains information regarding the following: (a) the beginning balance of funds on deposit in the Electric Power Fund (“Fund”), including the amounts on deposit in each account and sub-account of the Fund; (b) the amounts projected to be necessary to pay the principal and interest on all bonds as well as all other Bond Related Costs as and when the same are projected to become due, and the projected amount of Bond Charges required to be collected for such purpose; and (c) the amount needed to pay the Department’s costs, including all Retail Revenue Requirements.

¹ Under the Rate Agreement, the “Retail Revenue Requirement” is the amount to be recovered from “Power Charges” on IOU customers. The assessment on customers of Electric Service Providers of charges to recover Department Costs (e.g., “Direct Access Power Charge Revenues”) reduces the amount of the “Retail Revenue Requirement,” but has no material impact on the Department’s costs.

DETERMINATION OF REVENUE REQUIREMENT

Pursuant to the Act, the Rate Agreement, and the Regulations, the Department determines, on the basis of the materials presented and referred to by this Revised 2017 Determination (including the materials referenced in Section H), that it has adequate reserves in its Power Charge Accounts at all times to pay all Department costs.

As required by the Act, the Rate Agreement, and the Regulations, the Department makes a separate revenue requirement determination for the Bond Charge Accounts. For 2017, the Department determines that its cash basis Bond Charge Account revenue requirement is \$887 million.

This 2017 Determination takes into account preliminary actual operating results through September 30, 2016. It also takes into account the response from the IOUs to the Department's request for information pertaining to modeling assumptions and electric loads. During the 2017 Revenue Requirement period, the Department projects that virtually all of the revenues it receives will be Bond Charge Revenues that will flow through the Bond Charge Accounts, except for amounts, if any, yet to be received by DWR from claims related to power purchases by DWR under the Power Supply Program. For this Determination, the Department is not projecting revenues nor any cost associated with the power purchase contracts. The Department projects to maintain approximately \$10 million in the Power Charge Accounts to account for any contingent liabilities associated with the power purchase contracts. After the Department determines such amounts to be Excess Amounts, it will consult with the CPUC to return such funds to benefit the ratepayers in the IOU service areas. Table A-1 shows a summary of the Department's revenue requirement and the accounts associated with projected Department Costs ("Power Charge Accounts") for 2017. These figures are compared to those reflected in the Department's 2016 Determination of Revenue Requirements. A summary and comparison of the Department's revenue requirement and the accounts associated with its Bond Related Costs ("Bond Charge Accounts") is presented in Table A-2. Definitions of key accounts and sub-accounts are presented within this revenue requirement.

TABLE A-1
SUMMARY OF THE DEPARTMENT'S 2017 POWER CHARGE REVENUE
REQUIREMENT AND POWER CHARGE ACCOUNTS
AND COMPARISON TO 2016¹
(\$ Millions)

Line	Description	2017 ²	2016 ³	Difference
1	<i>Beginning Balance in Power Charge Accounts</i>			
2	Operating Accounts	10	65	(55)
3	Operating Reserve Account	-	2	(2)
4	Total Beginning Balance in Power Charge Accounts	10	68	(58)
5	<i>Power Charge Accounts Operating Revenues</i>			
6	Power Charge Revenues ⁴	-	-	-
7	Return of Excess Amounts to Customers ⁵	-	(58)	58
8	Interest Earnings on Fund Balances	0	0	(0)
9	Total Power Charge Accounts Operating Revenues	0	(58)	58
10	<i>Power Charge Accounts Operating Expenses</i>			
11	Administrative and General Expenses	-	-	-
12	Total Power Costs	-	-	-
13	Total Power Charge Accounts Operating Expenses	-	-	-
14	Net Operating Revenues	0	(58)	58
15	Ending Aggregate Balance in Power Charge Accounts	10	10	(0)

¹Numbers may not add due to rounding.

²As included herein.

³As reflected in the 2016 Determination.

⁴Includes Bundled Customer revenues and Cost Responsibility Surcharge revenues.

⁵Comprised of surplus reserves meeting the definition of Excess Amounts within the Power Supply Revenue Bond Indenture.

TABLE A-2
SUMMARY OF THE DEPARTMENT'S 2017 BOND CHARGE REVENUE
REQUIREMENT AND BOND CHARGE ACCOUNTS
AND COMPARISON TO 2016¹
(\$ Millions)

Line	Description	2017 ²	2016 ³	Difference
1	<i>Beginning Balance in Bond Charge Accounts</i>			
2	Bond Charge Collection Account	192	151	40
3	Bond Charge Payment Account	719	720	(1)
4	Debt Service Reserve Account	882	909	(27)
5	Total Beginning Balance in Bond Charge Accounts	1,793	1,781	13
6	<i>Bond Charge Accounts Revenues</i>			
7	Bond Charge Revenues from Utilities ⁴	887	891	(4)
8	Interest Earnings on Fund Balances	23	19	4
9	Total Bond Charge Accounts Revenues	910	911	(1)
10	<i>Bond Charge Accounts Expenses</i>			
11	Debt Service on Bonds	882	909	(27)
12	Administrative and General Expenses	15	15	-
13	Total Bond Charge Accounts Expenses	897	924	(27)
14	Net Bond Charge Revenues	13	(14)	26
15	Ending Aggregate Balance in Bond Charge Accounts	1,806	1,767	39
Target Minimum Bond Charge Account Balances		Target (Millions of Dollars)		
Bond Charge Collection Account: An amount equal to one month's required deposit to the Bond Charge Payment Account for projected debt service		74 - 75	76 - 77	Different
Bond Charge Payment Account: An amount equal to the debt service accrued and unpaid through the end of the third next succeeding calendar month		301 - 1,022	306 - 1,025	Different
Debt Service Reserve Account: Established as the maximum annual debt service		882	909	(27)

¹Numbers may not add due to rounding.

²As included herein.

³As reflected in the 2016 Determination.

⁴Includes Bundled Customer and Cost Responsibility Surcharge revenues.

FUTURE ADJUSTMENT OF REVENUE REQUIREMENT

The Department may continue to revise its revenue requirement for the 2017 Revenue Requirement Period given the potential for refinancing the Department's Power Bonds, receipt of settlements from any legal proceedings involving the Department² and any other events that may materially affect the realized or projected financial performance of the Power Charge Accounts or the Bond Charge Accounts. In such event, the Department will inform the Commission of these material changes and will revise its revenue requirement accordingly.

B. BACKGROUND

Information on the Act and the Rate Agreement, which have not changed since 2002, is contained in the Department's prior Determinations of Revenue Requirement, copies of which have been incorporated into the administrative record supporting this Determination. Each Determination of Revenue Requirements builds upon the prior Determinations.

A summary of the 2016 Revenue Requirements is provided below:

The Department sent requests for information to each IOU on May 29, 2015, which solicited an update of various modeling assumptions and customer load information. The information obtained from the IOUs served as the basis for the Department's analytical and forecasting efforts related to the 2016 Determination. The Department also considered other important criteria, including, but not limited to, Commission Decisions, Bond Indenture requirements and information pertaining to electric loads departing IOU service.

The Department provided interested persons with quantitative results from its analytical models, subject to applicable non-disclosure requirements. Interested parties were advised to submit comments no later than July 30, 2015. No comments were received.

Before providing the 2016 Determination to the CPUC for allocation, the Department included in its Power Charge Accounts a settlement of approximately \$23 million which was received in June 2015. The settlement was received from Transalta Energy Marketing and was associated with the Department's participation, along with other California Parties, in the Federal Energy Regulatory Commission Refund Proceedings associated with the California energy crisis in 2000 and 2001.

The 2016 Revenue Requirement was provided to the Commission for allocation on August 6, 2015 and allocated to ratepayers in the IOU service areas by the Commission on December 2, 2015.

THE 2017 DETERMINATION

The Department sent requests for information to each IOU on May 27, 2016, which solicited an update of various modeling assumptions, customer load information and operational considerations. The information obtained from the IOUs served as the basis for the Department's analytical and forecasting efforts related to the Proposed 2017 Determination. The Department also considered other important criteria, including, but not limited to, Commission Decisions, Bond Indenture requirements, and information pertaining to electric loads departing IOU service.

² The Department is a participant, along with other California Parties, in the Federal Energy Regulatory Commission Refund Proceedings associated with the energy crisis in California in 2000 and 2001. When the Department receives amounts associated with settlements it will notify the CPUC and support its allocation of any excess amounts that can be returned to ratepayers in the IOU service areas.

The resulting data was incorporated into spreadsheet-based analytical models that were used to estimate IOU load volumes subject to Bond Charges and became a part of the projections leading to the Proposed 2017 Determination.

The Department provided interested persons with quantitative results from its analytical models, subject to applicable non-disclosure requirements. Interested parties were advised to submit comments no later than July 28, 2016. No comments were received

After its internal review, the Department made the following changes in the proposed 2017 Determination:

- 1) Non-exempt load subject to the bond charge was reviewed for the remaining months of 2016. The non-exempt electric load data for the remaining months of 2016 were lower than the load used in the 2016 Revenue Requirement. After adjusting the non-exempt load upward, the starting balances in the Bond Charge Accounts increased which results in a lower Bond Charge for 2017.

THE REVISED 2017 DETERMINATION

The Department has reviewed certain matters relating to its August 4, 2016 Determination, including, but not limited to, operating results of the Electric Power Fund (the “Fund”) as of September 30, 2016 and the 2016P Power Bond Refunding. The Department proposed to revise its August 4, 2016 Determination under Section 516 of the Regulations to address the following matters:

- 1) Updated actual Electric Power Fund Operating and Bond Account operating results through September 30, 2016.
- 2) Updated financing assumptions reflecting the \$567.2 million 2016P refunding for savings, which resulted in annual cash flow savings of \$12 million.

The Department provided interested persons with quantitative results from its analytical models, subject to applicable non-disclosure requirements. Interested parties were advised to submit comments no later than October 20, 2016. No comments were received. As a result of the revisions noted above, the Department reduces its Bond Account Revenue Requirement by \$11 million. Table B-2 summarizes the changes between this Revised 2017 Determination and the 2017 Determination published on August 4, 2016 for the Bond Charge revenue requirement and Bond Charge Accounts³.

³ Changes to the Power Charge Revenue Requirement would normally be shown in Table B-1

TABLE B-2
SUMMARY OF THE DEPARTMENT'S 2017 BOND CHARGE REVENUE
REQUIREMENTS AND BOND CHARGE ACCOUNTS
AND COMPARISON TO AUGUST 2016 DETERMINATION¹
(\$ Millions)

Line	Description	2017 Revised	2017 RR-8-4-2016 filing	Difference
1	<i>Beginning Balance in Bond Charge Accounts</i>			
2	Bond Charge Collection Account	192	178	14
3	Bond Charge Payment Account	719	723	(3)
4	Debt Service Reserve Account	882	909	(27)
5	Total Beginning Balance in Bond Charge Accounts	1,793	1,810	(17)
6	<i>Bond Charge Accounts Revenues</i>			
7	Bond Charge Revenues from Utilities ²	887	898	(11)
8	Interest Earnings on Fund Balances	23	22	1
9	Total Bond Charge Accounts Revenues	910	920	(10)
10	<i>Bond Charge Accounts Expenses</i>			
11	Debt Service on Bonds	882	894	(12)
12	Administrative and General Expenses	15	15	-
13	Total Bond Charge Accounts Expenses	897	909	(12)
14	Net Bond Charge Revenues	13	11	2
15	Ending Aggregate Balance in Bond Charge Accounts	1,806	1,821	(15)

Target Minimum Bond Charge Account Balances	Target (Millions of Dollars)		
Bond Charge Collection Account: An amount equal to one month's required deposit to the Bond Charge Payment Account for projected debt service	74 - 75	75 - 76	Different
Bond Charge Payment Account: An amount equal to the debt service accrued and unpaid through the end of the third next succeeding calendar month	301 - 1,022	304 - 1,025	Different
Debt Service Reserve Account: Established as the maximum annual debt service	882	894	(12)

¹ Numbers may not add due to rounding.

²Includes Bundled Customer and Cost Responsibility Surcharge revenues.

C. QUARTERLY SUMMARY OF REVENUE REQUIREMENT FOR THE PERIOD JANUARY 1, 2017 THROUGH DECEMBER 31, 2017

For 2017, the Department’s revenue requirement primarily consists of Bond Related Costs, which are to be satisfied primarily by Bond Charge Revenues.

The Department is not projecting revenues nor any cost associated with the power purchase contracts. The Department projects to maintain approximately \$10 million in the Power Charge Accounts to account for any contingent liabilities associated with the power purchase contracts. After the Department determines such amounts to be Excess Amounts, it will consult with the CPUC to return such funds to benefit the ratepayers in the IOU service areas. Excess Amounts as defined within the bond indenture shall be used, at the direction of the Commission after consultation with the Department, to (i) adjust customer charges, or (ii) with the agreement of the Department, reduce debt outstanding under the indenture, in all instances upon consideration of the interests of the retail customers of the IOUs and DWR.

**TABLE C-1
POWER PURCHASE PROGRAM, REVENUE REQUIREMENT
POWER SOURCES AND USES
(\$ Millions)**

Line	Description	Amounts for Revenue Requirement Period (millions)				
		Q1	Q2	Q3	Q4	Total
<i>Sources</i>						
1	Balances in Accounts					10
2	Power Charge Revenues	-	-	-	-	-
3	Interest Earnings on Power Charge Account Balances	0.02	0.01	0.01	0.01	0.06
4	Total Sources					10
<i>Uses</i>						
5	Return of Excess Cash to Customers	-	-	-	-	-
6	Administrative and General Expenses	-	-	-	-	-
7	Power Costs	-	-	-	-	-
8					Ending Balance	10
9					Total Uses	10

During 2017, the Department projects that it will incur the following Bond Related Costs: (a) \$882 million for debt service on the Bonds and (b) \$15 million for administrative and general expenses. Funds to meet this requirement are provided from: (a) \$23 million in interest earned on Bond Charge Account balances and (b) \$887 million from Bond Charge Revenues (including CRS revenues from customers other than customers of the IOUs and DWR). Table C-2 provides a quarterly projection of sources and uses relating to the Bond Charge Accounts for the 2017 Revenue Requirement Period.

**TABLE C-2
POWER PURCHASE PROGRAM, REVENUE REQUIREMENT
BOND SOURCES AND USES
(\$ Millions)**

Line	Description	Amounts for Revenue Requirement Period (millions)				
		Q1	Q2	Q3	Q4	Total
<i>Sources</i>						
1		Balances in Accounts				1,793
2	Bond Charge Revenues	210	201	239	237	887
3	Interest Earnings on Bond Charge Account Balances	2	10	2	9	23
4		Total Sources				2,703
<i>Uses</i>						
5	Debt Service Payments	-	795	-	87	882
6	Administrative and General Expenses	-	15	-	-	15
7		Ending Balance				1,806
8		Total Uses				2,703

D. ASSUMPTIONS GOVERNING THE DEPARTMENT’S PROJECTION OF REVENUE REQUIREMENT FOR THE 2017 REVENUE REQUIREMENT PERIOD

The Department based this 2017 Determination on a number of assumptions regarding retail customer load and administrative and general expenses, as well as other considerations affecting the Department’s revenues and expenses.

ESTIMATED RETAIL LOAD

The Department obtained the Utilities’ most recent retail energy forecasts in June 2016. The Department reviewed the Utilities’ underlying forecast assumptions and the forecasts for Direct Access and Community Choice Aggregation (“CCA”) in California. These assumptions are discussed in greater detail below.

Table D-1 shows the projected aggregate 2017 load forecast (in gigawatt hours) for the PG&E, SCE and SDG&E service areas combined during 2017. The information represents forecasts at the customer meter.

TABLE D-1
ESTIMATED ANNUAL ENERGY REQUIREMENTS⁴

	Bundled Load	Direct Access and CCA	Total Load
Total	156,447,531	29,100,746	185,548,277

DIRECT ACCESS

The Department’s direct access estimates are based primarily on data provided by each IOU. Where applicable, the data provided by each IOU was adjusted to account for the expected effects of Senate Bill (SB) 695.

On October 11, 2009, SB 695 was signed into law as an urgency statute. SB 695 allows individual retail nonresidential end-use customers of the IOUs to acquire electric service from non-IOU energy suppliers, up to a customer aggregated, service-area specific kWh limit. As of the date of this revenue requirement, except for this express authorization for increased direct access transactions under SB 695, the previously enacted suspension of direct access remains in effect. Recent legislation such as Senate Bill 286, which was introduced on February 19, 2015 and is currently held at the California State Assembly Appropriations Committee, contemplates expanding the existing direct access program to allow 8,000 gigawatt-hours (GWh) of new direct access to customers over a period of three years, which would be allocated proportionally among the three IOU service areas. The bill would allow non-residential customers to purchase 100 percent renewable energy directly from energy service providers.

On March 15, 2010, the CPUC issued Decision 10-03-022 authorized increases in the maximum direct access load for each IOU service area, as specified in SB 695. The maximum load of allowable direct access is established with each IOU service territory as the maximum total kWh supplied by all non-IOU energy suppliers to distribution customers of that IOU during any sequential 12-month period between April 1, 1998 and the effective date of the section of the Public Utilities Code modified by SB 695 (October 11, 2009).

The direct access maximum load authorized by the CPUC in Decision 10-03-022, if reached in all three service areas, would increase the percentage of each IOU’s retail load attributable to direct access customers to approximately 14 percent, based on current estimates of total retail load. Regardless of the level of direct access participation within the IOU service areas, direct access customers will still be assessed Bond Charges and DWR’s revenue requirement will be recovered in the same manner as has been successfully implemented over the duration of the Power Supply Program. For the 2017 Revenue Requirement period, the total percentage of direct access load, compared to retail load in the three IOU service areas, is projected to be approximately 13 percent.

COMMUNITY CHOICE AGGREGATION

Community Choice Aggregation, authorized by legislation enacted in 2002 (“AB 117”), refers to the ability of a city or county to aggregate all the electrical demand of the residents, businesses and municipal users under its jurisdiction and to meet this demand from an electricity provider other than an IOU, such as an independent electrical service provider. In the decision implementing

⁴ Certain load is exempt from DWR charges. Bond Charges are allocated to non-exempt load.

AB 117, the CPUC determined that future Community Choice Aggregation customers shall pay charges (including DWR charges) intended to keep the bundled customers of the IOUs indifferent to CCA loads departing bundled service.

Pursuant to AB 117, six entities have filed Community Choice Aggregation Implementation Plans with the CPUC. The San Joaquin Valley Power Authority (“SJVPA”) filed an Implementation Plan with the CPUC on January 29, 2007, the Marin Energy Authority (“MEA”) filed an Implementation Plan with the CPUC on December 4, 2009, the City and County of San Francisco (“CCSF”) filed an Implementation Plan (as “CleanPowerSF”) with the CPUC on March 3, 2010, the Sonoma County Water Agency filed an Implementation Plan (as “Sonoma Clean Power” or “SCP”) on August 22, 2013, the Lancaster Power Authority filed an Implementation Plan (as “Lancaster CCA”) on June 1, 2014 and the Peninsula Clean Energy (“PCE”) filed an Implementation Plan in April 2016. PCE has yet to receive certification from the CPUC in regards to their Implementation Plan. On March 13, 2015 CPUC certified Lancaster CCA’s Revised Implementation Plan. In May, Lancaster Choice Energy began service to 850 customers in the City of Lancaster. The SJVPA Implementation Plan was certified by the CPUC in May 2007; however, CCA implementation was suspended by SJVPA on June 25, 2009. The initial MEA Implementation Plan was certified on February 2, 2010 and the CleanPowerSF Implementation Plan was certified by the CPUC on May 18, 2010. The SCP Implementation Plan was certified by the CPUC on October 4, 2013 and was registered as a Community Choice Aggregator on January 21, 2014. In March 2016, twelve communities in Santa Clara County formed a Joint Powers Agency named the Silicon Valley Clean Energy Authority (SVCE). SVCE has not filed an implementation plan with the CPUC but expects to begin offering services in April 2017.

MEA administers the plan through Marin Clean Energy (“MCE”) and serves approximately 175,000 customers in Marin County, unincorporated Napa County, along with the cities of Benicia, El Cerrito, San Pablo, Richmond, Walnut Creek, Moraga, Lafayette, Napa, Yountville, Calistoga, American Canyon, St. Helena, and Pinole. MEA member (municipal) accounts and a subset of residential, commercial and/or industrial accounts, comprising approximately 20 percent of MEA’s total customer load, began service on May 7, 2010. In December 2011, MEA filed a Revised Implementation Plan, which included information on additional members. The Revised Implementation Plan was certified by the CPUC on January 3, 2012. In July 2012, MEA filed a Revised Implementation Plan that reflected information pertaining to new members (the City of Richmond), and this Revised Plan was certified by the CPUC on September 26, 2012. Further, MEA filed an additional Revised Implementation Plan in August 2012, which conformed to CPUC privacy rules. This Implementation Plan was certified by the CPUC in January 2013.

SCP began offering retail electric service to customers in May 2014. The cities of Cotati, Sebastopol, Santa Rosa, Cloverdale, Sonoma, Rohnert Park, Petaluma, the town of Windsor, and all of the County’s unincorporated area have elected to participate. Now SCP is the default provider in all of Sonoma communities, save Healdsburg which runs its own utility. SCP provides service to approximately 198,000 customers.

Communities that are considering forming a CCA include the cities of San Jose, Arcata, San Diego, Victorville, San Luis Obispo, the counties of Los Angeles, San Mateo, Alameda, Contra Costa, Mendocino, Humboldt, Yolo and the Monterey Bay Area. On June 3, 2014, Alameda County

approved a \$1.3 million feasibility study to form a Joint Powers Authority. In the later part of 2015, Mountain View and its partners began a \$450,000 technical study to determine how to jump-start a local program. A first step for CCA for Alameda County and Mountain View.

While CCA could lead to substantial reductions in bundled sales volumes, the CPUC proceeding implementing AB 117 established that the Cost Responsibility Surcharge (“CRS”) would be paid by CCA customers and that the method for calculating the CRS adopted for direct access and municipal departing load customers, as modified by CPUC Decision 06-07-030, would also apply to CCA customers.

COST RESPONSIBILITY SURCHARGE

In a series of decisions, the CPUC ordered certain classes of direct access, municipal and customer generation departing load, and CCA customers to pay the CRS related to historical stranded power costs and ongoing above-market power costs. Included in the CRS is a DWR Bond Charge component, which is assessed to pay debt service associated with DWR’s bond issuances and a DWR Power Charge component, which pays a pro-rata portion of the above-market costs of the DWR power portfolio. The Bond Charge and the Power Charge components are rates imposed on total electricity usage by direct access, departing load, and CCA customers by the CPUC in concert with the establishment of Power Charges and Bond Charges on bundled customers.

CRS revenues reduce the amount of Bond Charges and Power Charges that must be imposed on bundled customers to recover Bond Related Costs and Department Costs. In the aggregate, the payments by direct access load, departing load, CCA load, and from bundled customer load for the DWR Bond Charge and the DWR Power Charge, flow to DWR to recover the DWR Bond Related Costs and Department Costs.

ADMINISTRATIVE AND GENERAL COSTS

The Department’s administrative and general costs of \$15 million consist of \$12 million for appropriated budget expenditures including funds for labor and benefits, pro-rata charges for services provided to the power supply program by other State agencies and \$3 million for consulting services for development and monitoring of the revenue requirement, litigation and dispute resolution support, power contract management, and financial advisory services for managing the outstanding debt portfolio and related reserves. The Department collects its administrative and general costs through Bond Charges⁵.

FINANCING RELATED ASSUMPTIONS

For purposes of calculating the interest earnings on account balances during 2017, the Department assumes a 2.11 percent earnings rate for the Debt Service Reserve Account and a 0.545 percent earnings rate for all other accounts during the 2017 Revenue Requirement Period.

The Department currently has \$4.621 billion of fixed rate bonds outstanding. The projected average interest rate for all fixed rate bonds for the 2017 Revenue Requirement Period is 4.457 percent.

⁵ Beginning in January 2016

ACCOUNTS AND FLOW OF FUNDS UNDER THE BOND INDENTURE

General information on the Accounts and flow of funds under the Bond Indenture, which has not changed since the bonds were issued in 2002, is contained in the Department's prior Determinations of Revenue Requirement, copies of which have been incorporated into the administrative record supporting this Determination.

Information specific to certain Accounts for this Determination is as follows.

OPERATING ACCOUNT

The Department has covenanted in the Bond Indenture to include in its revenue requirement amounts estimated to be sufficient to cause the amount on deposit in the Operating Account at all times during any calendar month to equal the Minimum Operating Expense Available Balance ("MOEAB"). The Bond Indenture leaves to the Department the determination as to how far into the future this minimum test of sufficiency should be met. Moreover, the covenant concerns the minimum amount required to be projected to be on deposit, and leaves to the Department the determination as to what total reserves are appropriate or required in the fulfillment of its duties under Section 80134 of the Act.

For the purposes of this Determination, the Department has determined that it does not have an MOEAB amount for the 2017 Revenue Requirement Period. The Department has determined that the amount projected to be on deposit in the Operating Account, including the amount therein that acts as a reserve for operating expenses, is just and reasonable, based primarily on maintaining sufficient amounts for any remaining cost obligations of the expired power and natural gas supply portfolio and related costs, as well as the factors discussed in Section F— "Key Uncertainties in the Revenue Requirement Determination."

OPERATING RESERVE ACCOUNT

The Operating Reserve Account Requirement ("ORAR") is to be calculated, in respect of each Revenue Requirement Period, as the greater of (a) the largest aggregate amount projected by the Department by which Operating Expenses exceed Power Charge Revenues during any consecutive seven calendar months commencing in such Revenue Requirement Period and (b) 12 percent of the Department's projected annual Operating Expenses, provided, however, that the projected amount will not be less than the applicable percentage of Operating Expenses for the most recent 12-month period for which reasonably full and complete Operating Expense information is available, adjusted in accordance with the Indenture to the extent the Department no longer is financially responsible for any particular Power Supply Contract. All projections are to be based on such assumptions as the Department deems to be appropriate after consultation with the Commission and taking into account a range of possible future outcomes (i.e., "Stress Case").

The Department does not have an ORAR amount for the 2017 Revenue Requirement Period.

DEBT SERVICE RESERVE ACCOUNT

For purposes of calculating the amount of the Debt Service Reserve Requirement in accordance with the Bond Indenture, the Department determines the Maximum Annual Debt Service ("MADS") for all outstanding Power Supply Revenue Bonds through final bond maturity. The

MADS amount must be carried in the Debt Service Reserve Account at all times to satisfy Bond Indenture requirements.

For the 2017 Revenue Requirement Period, the Department has determined the Debt Service Reserve Requirement to be \$882 million. The Department projects to maintain this amount at all times during the 2017 Revenue Requirement Period.

E. POWER CONTRACT SETTLEMENT SUMMARY

The California Parties, which include the Governor’s Office, California Attorney General’s Office, CPUC, the Department, and the IOUs, have participated in Federal Energy Regulatory Commission (“FERC”) proceedings to recover excess electricity costs incurred by ratepayers since 2001. These FERC proceedings have led to several settlement agreements between the California Parties and the responsible energy suppliers. Any future settlement distributions will reduce Department costs and, as a result, decrease the Department’s revenue requirement. Copies of prior settlement agreements are incorporated into the administrative record supporting this Determination.

F. KEY UNCERTAINTIES IN THE REVENUE REQUIREMENT DETERMINATION

The Department faces a number of uncertainties that may require material changes to its revenue requirement for the 2017 Revenue Requirement Period. Several risk factors are outlined below and additional information may be found in each of the bond financing Official Statements, which may be obtained from the Treasurer of the State of California.

- 1) Determination of Bond Charges;
 - a. Potential administrative and legal challenges to DWR’s revenue requirement; and
 - b. Application and enforcement of the Rate Agreement’s Bond Charge rate covenant.
- 2) Collection of Bond Charges:
 - a. Potential rejection of Servicing Arrangements or other disruption of servicing arrangements.
- 3) Potential increases in overall electric rates:
 - a. Changes in general economic conditions;
 - b. Market manipulation; and
 - c. Actions affecting retail rates.
- 4) Potential decrease in DWR customer base:
 - a. Direct Access; and
 - b. Load departing IOU service.

- 5) Uncertainties relating to government action:
 - a. California Emergency Services Act;
 - b. Possible State legislation or action; and
 - c. Possible Federal legislation or action.

- 6) Uncertainties relating to financial industry and markets:
 - a. Effects of bond refunding or similar action;
 - b. Constraints in the flow and availability of credit facilities and capital.

G. JUST AND REASONABLE DETERMINATION

PRIOR DETERMINATIONS

Each new revenue requirement determination builds, to the extent necessary or appropriate, on the various preceding determinations. Successive determinations incorporate the information from each previous determination into the supporting administrative record. Determinations are available for review on the CERS website by interested persons, and the supporting materials are available at the CERS office in Sacramento, subject to applicable non-disclosure requirements.

Determination	Date Issued
2001-2003, including Reexamination and Redetermination for 2001-2002	August 16, 2002
Reconsideration of Just and Reasonableness of 2001 - 2003	August 19, 2004
2003 Supplemental	July 1, 2003
2004	September 18, 2003
2004 Supplemental	April 16, 2004
2005	November 4, 2004
Revised 2005	March 16, 2005
2006	August 3, 2005
Final 2006	October 27, 2005
2007	August 2, 2006
Revised 2007	October 30, 2006
2008	August 22, 2007
Revised 2008	October 31, 2007
Supplemental 2008	February 15, 2008
2009	August 6, 2008
Revised 2009	October 29, 2008
2010	August 6, 2009
Revised 2010	October 27, 2009
2011	August 5, 2010
Revised 2011	October 26, 2010
2012	August 4, 2011
Revised 2012	October 27, 2011
2013	August 2, 2012
Revised 2013	October 15, 2012
2014	August 1, 2013
Revised 2014	October 18, 2013
2015	August 21, 2014
Revised 2015	October 23, 2014
2016	August 6, 2015
2017	August 4, 2016

THE REVISED 2017 DETERMINATION

PUBLIC PROCESS

Under the terms of the Rate Agreement between the Department and the Commission, and the terms of the Bond Indenture, the Department has agreed to review, determine and revise its Retail Revenue Requirement at least annually.

The Department issued its Proposed Revised Determination of Revenue Requirements for the period January 1, 2017 through December 31, 2017 for public review and comment under the Regulations promulgated pursuant to the California Administrative Procedures Act on October 14, 2016. The Department provided interested persons with quantitative results from its contract volume and cost analytical models and Financial Model, subject to applicable non-disclosure requirements. Interested parties were advised to submit comments no later than October 20, 2016. No comments were received.

JUST AND REASONABLE DETERMINATION

The Department, after completing its assessment of the administrative record, the Act, the Regulations, Bond Indenture requirements and the Rate Agreement finds this Determination, for the period of January 1, 2017 through December 31, 2017, to be a just and reasonable determination of its 2017 Revenue Requirement.

H. ANNOTATED REFERENCE INDEX OF MATERIALS UPON WHICH THE DEPARTMENT RELIED TO MAKE THE DETERMINATION

Volume	Record Number	Date	Record Title
DWR17pRR	1	10/16/2015	DWR Electric Power Fund Audited Financial Statements, for Years ending 6/30/15
DWR17pRR	2	12/14/2015	CPUC D. 15-12-003 Allocating The Final Revised 2016 Revenue Requirement
DWR17pRR	3	02/16/2016	DWR Electric Power Fund Financial Statements, 12/31/15
DWR17pRR	5	05/27/2016	DWR "Pacheco" email transmittal of Data Request 1 to PG&E
DWR17pRR	6	05/27/2016	DWR "Pacheco" email transmittal of Data Request 1 to SCE
DWR17pRR	7	05/27/2016	DWR "Pacheco" email transmittal of Data Request 1 to SDG&E
DWR17pRR	8	05/16/2016	DWR Electric Power Fund Financial Statements, 3/31/16
DWR17pRR	9	06/16/2016	CONFIDENTIAL: NOT FOR PUBLIC RELEASE: SDG&E Data Responses
DWR17pRR	10	06/16/2016	CONFIDENTIAL: NOT FOR PUBLIC RELEASE: PGE - Data Responses
DWR17pRR	11	06/17/2016	CONFIDENTIAL: NOT FOR PUBLIC RELEASE: SCE - Data Responses
DWR17pRR	12	7/7/2016	CONFIDENTIAL: NOT FOR PUBLIC RELEASE: Financial Model (CFMG5V42i - 2017 RR 7-7-2016 filing.) Projection of Revenue Requirement
DWR17pRR	13	7/7/2016	Proposed Determination of Revenue Requirement for 2017, including the Determination, The Notice, and Regulations.
DWR17pRR	14	7/7/2016	CONFIDENTIAL: NOT FOR PUBLIC RELEASE: Data files supporting the Proposed Determination of Revenue Requirement for 2017, specific to PG&E
DWR17pRR	15	7/7/2016	CONFIDENTIAL: NOT FOR PUBLIC RELEASE: Data files supporting the Proposed Determination of Revenue Requirement for 2017, specific to SCE
DWR17pRR	16	7/7/2016	CONFIDENTIAL: NOT FOR PUBLIC RELEASE: Data files supporting the Proposed Determination of Revenue Requirement for 2017, specific to SDG&E
DWR17pRR	17	8/4/2016	CONFIDENTIAL: NOT FOR PUBLIC RELEASE: Financial Model (CFMG5V43c - 2017 RR 8-4-2016 filing.xlsm) Determination of Revenue Requirement

DWR17pRR	18	8/4/2016	Determination of Revenue Requirement for 2017, including the Determination, The Notice, and Regulations.
DWR17pRR	19	8/4/2016	CONFIDENTIAL: NOT FOR PUBLIC RELEASE: Data files supporting the Determination of Revenue Requirement for 2017, specific to PG&E
DWR17pRR	20	8/4/2016	CONFIDENTIAL: NOT FOR PUBLIC RELEASE: Data files supporting the Determination of Revenue Requirement for 2017, specific to SCE
DWR17pRR	21	8/4/2016	CONFIDENTIAL: NOT FOR PUBLIC RELEASE: Data files supporting the Determination of Revenue Requirement for 2017, specific to SDG&E
DWR17pRR	22	9/28/2016	2016P Bond Refunding Statistics
DWR17pRR	23	10/14/2016	CONFIDENTIAL: NOT FOR PUBLIC RELEASE: Financial Model (CFMG6V1a – 2017 RR 10-14-2016 filing.xlsm) Determination of Revenue Requirement
DWR17pRR	24	10/14/2016	Proposed Revised Determination of Revenue Requirement for 2017, including the Proposed Determination, The Notice, and Regulations.
DWR17pRR	25	10/14/2016	CONFIDENTIAL: NOT FOR PUBLIC RELEASE: Data files supporting the Proposed Determination of Revenue Requirement for 2017, specific to PG&E
DWR17pRR	26	10/14/2016	CONFIDENTIAL: NOT FOR PUBLIC RELEASE: Data files supporting the Proposed Determination of Revenue Requirement for 2017, specific to SCE
DWR17pRR	27	10/14/2016	CONFIDENTIAL: NOT FOR PUBLIC RELEASE: Data files supporting the Proposed Determination of Revenue Requirement for 2017, specific to SDG&E
DWR17pRR	28	10/21/16	Determination of Revenue Requirement for 2017, including the Determination, The Notice, and Regulations.