

NOTICE TO STATE WATER PROJECT CONTRACTORS



Date: **FEB 14 2017**

Number: 17-06

Subject: **Summary of the 2017 Statements of Charges Preparation**

From: 
Pedro Villalobos
Chief, State Water Project Analysis Office
Department of Water Resources

Attached for your information is the "Summary of the 2017 Statements of Charges Preparation."

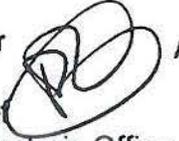
This summary document of the preparation of the 2017 Statements of Charges contains year-over-year comparison of 2017 projected costs and actual charges to the Re-Bill 2016, 2017 process changes, Contractor requested projects, and a detailed component-by-component analysis.

If you have any questions, please contact me at (916) 653-4313, or you may call Dave Paulson of my staff at (916) 653-7402.

Attachment

Memorandum

Date: **JAN 31 2017**

To: Mark E. Andersen
Acting Deputy Director 

Pedro Villalobos, Chief
State Water Project Analysis Office
From: Department of Water Resources

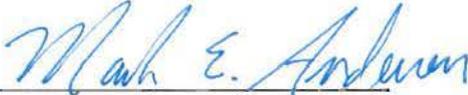
Subject: Summary of the 2017 Statements of Charges Preparation

Attached is a document that summarizes the preparation of the 2017 Statements of Charges. The document contains a year-over-year comparison of 2017 projected costs and actual charges to the Re-Bill 2016, 2017 process changes, Contractor requested projects, factors, and a detailed component-by-component analysis.

With your approval, the State Water Project Analysis Office will finalize the document and distribute it to the State Water Project Contractors via a Notice to Contractors.

If you have any questions or need additional information, please contact Dave Paulson of my staff at (916) 653-7402.

APPROVAL RECOMMENDED:



Mark E. Andersen
Acting Deputy Director



Date

Attachment

Summary of 2017 Statements of Charges

The 2017 total Statements of Charges (SOCs) for State Water Project (SWP) Capital Components, Minimum Components and other charges is \$1.199 billion. This represents a \$10 million (approximately one percent) decrease from the Re-Bill 2016 SOC of \$1.209 billion.

Table 1 is a comparison of the 2017 SOC to the 2016 Re-Bill and a summary view of SWP planned expenditures with associated annual charges by major cost component. The "Projected Costs" columns represent the water supply costs billable to the SWP Contractors from the programs discussed at the Department-SWP Contractor meetings. The charges the SWP Contractors pay are based on the allocated projected costs and any prior year adjustments.

Table 1. Comparison of 2017 Statements of Charges to the 2016 Re-Bill (November 2015)

Components	2017 SOC (Thousands of \$)			2016 Re-Bill (Thousands of \$)			Year-over-Year Change
	Projected Costs	Prior Year Adjustments	Amortized Charge	Projected Costs	Prior Year Adjustments	Amortized Charge	
Capital							
Transportation Component	73,148	-	153,629	71,424	-	152,146	1,484
Debt Service Projects	14,018	-	60,320	30,022	-	61,998	
East Branch Enlargement	-	-	38,580	-	(3)	37,141	1,439
Conservation Component	177,833	-	88,964	197,284	-	98,804	(9,840)
WSRB Surcharge	-	-	85,949	-	-	81,446	4,503
Capital Subtotal	264,999		427,442	298,729	(3)	431,534	(2,414)
Minimum							
Transportation Component	329,947	(49,309)	280,638	280,147	7,256	287,403	(6,765)
Conservation Component	215,203	-	198,603	205,389	-	199,629	(1,026)
EBE Minimum Component	9,877	1,060	10,936	8,892	(2,103)	6,789	4,147
Conservation RAS	-	-	(363)	-	-	(2,381)	2,018
Minimum Subtotal	555,027	(48,249)	489,814	494,428	5,153	491,440	(1,626)
Other (Various)							
Off-Aqueduct Power	-	-	4,300	-	-	15,121	(10,821)
Variable Component	278,462	(11,648)	266,814	263,956	404	264,359	2,454
Transportation RAS	7,730	2,581	10,311	2,046	4,462	6,508	3,803
Subtotal	286,192	(9,067)	281,425	266,002	4,866	285,988	(4,563)
Grand Total			1,198,681			1,208,963	(10,281)

* Conservation costs shown are for the respective bill year only.

SWP water contracting agencies (SWP Contractors) and their representatives independently review and analyze the annual SOC's in detail. This memorandum documents the major differences between the Bulletin 132-16 (B132-16) used to calculate the 2017 SOC's and the 2016 charges projected in last year's Bulletin 132-15. The data to support the SOC's are published in the annual Bulletin 132, Appendix B, which was mailed to the SWP Contractors for their use in analyzing the 2017 SOC's.

Formulation of the 2017 SOC's

In preparation for the 2017 SOC's, SWP divisions submitted preliminary Bulletin 132-16 cost projections that were shared with the SWP Contractors over several meetings in early February 2016. The meetings resulted in revised Bulletin 132-16 SWP cost projections which were utilized in developing the 2017 May Estimates. The May Estimates projected an increase in total charges of \$71 million compared with the 2016 Re-Bill charges, reflecting the overall increase in SWP program and project cost projections.

Upon review of 2015 actual expenditures and a comparison to the 2016 SWP Contractors' charges, the Department of Water Resources (Department) determined it prudent to enact rate reducing measures in the SWP Contractors' 2017 SOC's calculations that are applied to SWP program and project manager planned budgets. In late June, the State Water Project Analysis Office (SWPAO) completed the determination of the SWP Contractors' 2017 SOC's. The SOC's were mailed to the SWP Contractors on July 1, 2016. Even though the total cost projections received from SWP program/project managers increased in aggregate relative to 2016, the rate reducing measures enabled the Department to decrease the 2017 SOC's by \$81 million (approximately eight percent) relative to the 2017 May Estimate, leading to a decrease of \$10 million compared to the Re-Bill 2016 charges.

Process Changes for 2017

Several procedural changes were incorporated into the 2017 SOC's process. These changes include: the distribution of the Division of Operations and Maintenance's (O &M) projected baseline costs, the inclusion of 2015 and 2016 flow purchases, the inclusion of projected power credits and costs in the Delta Water Charge and future Variable Charges, and the inclusion of conservation power facility debt service obligations in the Water Systems Revenue Bond (WSRB) Surcharge calculation. These changes are discussed in detail below.

O&M Projected Baseline Costs

Last year during the 2016 SOC's calculation, a single year (2014) of actual costs was used to distribute the projected O&M baseline cost projections. When calculating the 2017 SOC's, the Department used a 2-year average (2014-2015) of actual expenditures to distribute the 2016 and 2017 O&M baseline cost projection. This process change is an attempt to reduce significant variances in individual repayment reach projected costs.

The goal is to move to a 3-year trend for the 2018 SOC's once enough historic data is available under the new process while remaining flexible enough to deviate from rote historic trend data analysis to accommodate significant and unexpected material changes that may arise from the Governor's Office directives, regulatory changes, emergencies, and other unforeseen events.

Flow Purchases

In late 2015 additional flow release purchases from Oakdale Irrigation District/South San Joaquin Irrigation District (OID/SSJID) were negotiated by the SWP Contractors for delivery to the Delta in years 2015 and 2016, with no discussion of additional flow purchases in 2017. The cost recovery for these purchases was requested by the SWP Contractors to be collected on a pay-as-you-go basis. The program costs are recovered under a line item adjustment to the transportation minimum charges in billing attachment 4B, similar to the 2014 SOC's' inclusion of the San Joaquin River Augmentation program costs. Even though these are conservation related expenditures, there is no impact to the Delta Water Rate for 2017 because the calculation did not include costs for the OID/SSJID water purchases following the agreed upon cost recovery method. To further reduce charges, the Department did not include any planned 2017 OID/SSJID water purchase costs in the 2017 SOC's.

Projected Power Credits and Costs in the Delta Water Charge and Future Variable Charges

In prior years, the Department has included all projected capital conservation costs in the determination of the capital portion of the Delta Water Rate (DWR). However, this process did not reflect offsetting credits for power related construction activities that are collected through the variable billing component. For the 2017 SOC, the Department included a projected debt service obligation credit into the rate calculation for projected conservation power projects. The result of this credit is a net decrease to the capital Delta Water Rate and an equal offsetting increase to the variable billing component in future years for the projected debt service obligation.

Inclusion of Conservation Power Facility Debt Service in the WSRB Surcharge Calculation

In the 2017 SOC's, the Department also included conservation power facility debt service obligations into the calculation of the WSRB Surcharge calculation. This process change is intended to ensure the Department is meeting bond resolution obligations for revenue coverage requirements (cover). Typically, conservation power facility debt service is included in the variable melded unit rate calculation for cost recovery. The transportation variable component is reliant upon water deliveries for revenue collection and therefore is not a guaranteed revenue stream to meet bond resolution requirements. In order to meet bond coverage requirements, the Department will include the conservation power debt service in the WSRB surcharge calculation for the current billing year, and then credit the SWP Contractors in the same proportion the following year because the debt service will have been collected through the transportation variable component.

Additional Comparative Factors and Contractor Requested Projects Included in 2017 SOCs

The total charges for 2017 are \$1.199 billion, approximately one percent (\$10.3 million) lower than for 2016. This net change is primarily due to:

1. Decreased Delta Water Charges of nearly \$11 million due to the following rate reduction measures:
 - a. Revised cost projections from Division of Environmental Services, Delta Compliance Program, and Bay-Delta Office.
 - b. Elimination of labor escalation for transportation and conservation minimum programs.¹
 - c. Global conservation minimum reductions totaling \$60 million.
 - d. Inclusion of projected debt service credit in the Delta Water Rate capital component to properly account for conservation capital power facilities cost recovery through the variable billing component.
 - e. Decrease in 2015 actual conservation capital costs of \$46 million and reduced cost projections for 2016 of \$37 million.
2. Reduced 2017 O&M baseline cost projection by \$10 million.
3. Return of significant historical year overpayments related to the Transportation Minimum Operations, Maintenance, Power & Replacement (OMP&R) billing component driven primarily by calendar years 2013, 2015, and 2016.
4. Decreased Off-Aqueduct Power (OAP) facilities cost due to the defeasance of all remaining OAP facilities bonds in June 2016.
5. Increased WSRB Surcharge resulting from the sale of \$109.3 million in Series AU Water System Revenue Bonds.
6. Increased WSRB Surcharge resulting from the inclusion of 2017 conservation power debt service to meet bond resolution revenue requirement obligations.

The 2017 SOCs include the following SWP Contractor requested projects:

1. Oakdale Irrigation District/South San Joaquin Irrigation District flow release purchases (2015: \$5.75 million, 2016: \$11.75 million, totaling \$18.6 million with interest)
2. Lake Perris Seepage Recovery Project (2016: \$3.25 million, 2017: \$4.0 million, totaling \$7.4 million with interest)
3. South Bay Aqueduct (SBA) Penitencia Compression Vault (2016: \$5.3 million, 2017: \$3.36 million, totaling \$8.7 million)

Projected capital costs totaled \$265 million and the projected Minimum costs totaled \$555 million. However, due to amortization of costs and prior year adjustments, the charges for Capital and Minimum components were \$427 million and \$490 million, respectively. Prior year adjustments for the Minimum components totaled \$48 million and the “Other Charges” prior year adjustments totaled \$9 million.

¹ Labor escalation for calendar years 2016 (7.5%), 2017 (5%), and 2018 (5%) was included for Transportation Capital, Conservation Capital, Transportation RAS, and Conservation RAS billing components.

Details of Statement Components

Delta Water Charges

The Department implemented rate reduction measures that decreased both Delta Water Rate (DWR) capital and minimum components for 2017, including the integration of updated cost projections that SWPAO received from certain divisions after the May estimates were released. The rate reduction measures utilized in the 2017 SOCs process include:

1. Conservation Minimum Rate Reductions (\$60 million reduction from 2016-2018)
2. Elimination of labor escalation for 2016-2018 baseline and extraordinary cost projections
3. O&M baseline cost projection reductions (\$10 million reduction in 2017)
4. Cost projection revisions for 2016-2018 by Bay-Delta Office (BDO), Division of Environmental Services (DES), and Delta Compliance Program (DCP)(\$33 million in capital projections and \$30 million in minimum projections reductions from the 2017 May estimates)

The DWR used in computing the charges for 2017 is \$68.88 per acre-foot for the signers of the Monterey Amendment (signers). This rate is \$2.64 per acre-foot lower than the 2016 DWR Re-Bill rate of \$71.52 per acre-foot for the signers. The DWR for non-signers of the Monterey Amendment (non-signers) decreased \$2.73 per acre-foot to \$67.86 for 2017 from the 2016 Re-Bill rate of \$70.59 per acre-foot.

The capital component of the DWR decreased \$2.36 per acre-foot to \$21.32 per acre-foot in 2017 from \$23.68 per acre-foot in 2016 for the signers. The decrease in rate is primarily due to the inclusion of projected debt service credits for conservation power facility cost projections. The debt service credit contributed a reduction in the rate by \$4.32 per acre-foot.

SWPAO received updated cost projections from BDO, DES and DCP that reduced projected capital costs by approximately \$33 million from the May estimates which included a \$23.3 million reduction for Delta Compliance Program Yolo Bypass Restoration, and an \$8 million reduction in Salmon Protection Technology Studies. Additionally, the Department received \$20 million in funding from the Cap and Trade program to support two conservation capital projects, Hyatt Unit 1 and Thermalito Unit 1 turbine upgrades and refurbishments. The \$20 million in funding offsets the cost projections for those projects for years 2016-2017 and reduces overall capital DWR charges.

The minimum component of the DWR decreased by \$0.29 per acre-foot, from \$47.84 per acre-foot in 2016 to \$47.56 per acre-foot in 2017 for signers. B132-16 program cost projections received for 2016 through 2018 increased in total from the prior year projections. However, the implementation of the rate reduction measures highlighted above decreased the DWR minimum component for 2017. The major programs and projects contributing to the increase in conservation minimum cost projections include: Yolo Bypass Program (2016: \$14.989 million), Interagency Ecological Program Contracts (2016: \$6.36 million, 2017: \$7.95 million, 2018: \$8.303 million), Suisun Marsh Compliance Program (2016: \$5.989 million, 2017: \$6.793 million, 2018: \$6.853 million), Temporary Barriers Program (2016: \$7.95 million, 2017: \$8.0 million, 2018: \$8.75 million).

The third component of the Delta Water Charge is the conservation replacement accounting system (RAS) charge. The calculation of the conservation RAS component for the 2017 SOC's determined a net credit of \$363 thousand be returned to the SWP Contractors. The credit was primarily due to not having any conservation RAS projects included in the B132-2016 cost projections and the true-up of 2011 through 2014 historical costs. Historical cost corrections continue to reduce prior year expenditures for calendar years 2011 and 2013. The conservation RAS calculation includes a reserve amount of \$4 million.

Transportation Capital Component

The project interest rate remained unchanged at 4.610%. Total charges under the transportation capital billing component for 2017 totaled \$213.9 million, an increase of \$194 thousand from last year's charges. The slight increase in charge is primarily due to the Perris Dam Remediation Program (2016 \$42 million, 2017 \$22 million) and Perris Right of Way Program (2016 \$2.7 million).

2017 cost projections increased for projects at Gianelli Pumping Plant including: Radial Gates at \$2.8 million, Unit 7 motor at \$2.4 million, Butterfly Valve at \$930 thousand, and Protective Relays at \$1.7 million. Dos Amigos Pumping Plant also had Protective Relays projected at \$3 million, and Fire Systems Modernization at \$8 million. Edmonston Pumping Plant decreased in cost projections from the previous year, but the main work is Unit 14 Motor and Pump Refurbishment totaling \$5.9 million. Lake Perris projects continue to ramp up as projections for Dam Remediation and Environmental work increase to \$28 million. In 2018, work is projected to continue on the canal at various locations along the California Aqueduct totaling approximately \$5.4 million. Buena Vista Pumping Plant cost projections increased by \$1.4 million due to Valve Refurbishment work. Edmonston Pumping Plant has \$11 million in decreased projections, while Lake Perris has \$5.7 million and Castaic Lake nearly \$7 million in decreased cost projections. The 2019 cost projections show decreased in activity at Edmonston Pumping Plant, Devil's Canyon, Lake Perris, and Castaic Lake totaling \$80 million less in projections compared to the previous bill year. In the previous bill year, cost projections went out as far as 2026. This year's projections are only reaching 2019, so there are fewer cost projections that impact the capital bills at this time. Historical cost true-ups have also moved between reaches related to a water treatment plant in South Bay Reaches 1, 2, and 4 as well as Reach 1 and 7 of the California Aqueduct.

The current bill year shows increases to SWP Contractors that have been involved in permanent Table A sales. Coachella Valley Water District, Kern County Water Agency, and Metropolitan Water District of Southern California had the largest change in their current bill year charges, and all three are involved in multiple Table A sales. Permanent Table A sales have increased associated downstream costs resulting in increased charges by \$6.2 million. These charges will be credited in the SOC's to each SWP Contractor that participates in reaches that include permanent Table A sales. Historically these funds were retained until 2015 when a credit procedure was implemented. The refunds of the permanent Table A sales downstream credits are reflected in Attachment 11 of the SOC's.

All adjustments for over payments or under-collections of past transportation capital component charges are amortized to 2035 as required under provisions of the 1987 WSRB amendments to the water supply contracts. Currently the over/under payments are \$33.7 million for all SWP Contractors combined.

Transportation Minimum OMP&R Component

The OMP&R component charge for the 2017 SOC's totaled \$281 million, a decrease of approximately \$6.8 million from the 2016 SOC's. While the total charges decreased year-over-year, the bill year calculated component increased by approximately \$23 million.

The 2017 Division of Operations and Maintenance (O&M) baseline budget totaled \$273.6 million, which is \$12 million higher than the 2016 SOC's baseline cost projection. The 2017 O&M extraordinary cost projections totaled \$40 million primarily driven by the following projects: Southern Field Division Security Camera project at \$7.725 million, Refurbish/Remodel 6th Floor of Resources Building at \$3.84 million, and Power Markets Initiatives at \$3.162 million. New projects included in the 2017 cost projections are Edmonston Pumping Plant Cable Trench and Slope Repair for \$2.03 million. Other contributing cost increases include the Division of Fiscal Services 2017 cost projection totaling \$36.2 million, an increase of \$3.8 million from 2016.

As mentioned before, the Department implemented rate reduction measures for the 2017 SOC calculation. The following measures impacted the transportation minimum billing component:

1. Labor was not escalated for transportation minimum cost projections.
2. 2017 O&M Baseline reduction of \$10 million.

The 2017 SOC's include a prior year adjustment over-collection of \$49.3 million. The 2017 SOC's historical over-collection is primarily due to 2013 and 2015 actual cost true-ups of \$4.3 million and \$28.3 million respectively. The 2016 cost projection decreased by an additional \$4.1 million. Flexible storage changes increased costs in Lake Castaic by \$7.9 million. Reservoir storage values were updated to reflect the projected payback water for prior year flexible withdrawals from Lake Perris and Lake Castaic.

Additionally, the following SWP Contractor requested projects are included as line items in Attachment 4B of the 2017 SOC's: OID/SSJID Flow Release Purchase of \$18.6 million (2015: \$6.3 million, 2016: \$12.3 million), Lake Perris Seepage Recovery Project of \$7.4 million (2016: \$3.4 million, 2017: \$4.0 million)

The 2017 calculated component increased, primarily driven by cost projections and additional SWP Contractor projects. The net cost increase was offset by the rate reduction measures and prior year over-collections included in the 2017 SOC's, resulting in a net decrease in charges of \$33.2 million from the 2016 SOC's.

Transportation Variable OMP&R Component

The transportation variable OMP&R charge for 2017 is \$266.8 million, which is \$2.5 million higher than in 2016. These charges are based on 60% of maximum Table A water deliveries for 2017, with total turnout deliveries of 2.48 million acre-feet (MAF) and 2.3 MAF delivered through Dos Amigos Pumping Plant. The total energy requirement for pumping deliveries increased by approximately 8% from the 2016 SOC to the 2017 SOC, slightly increasing total power costs. The inclusion of projected debt service for conservation power projects increased costs by \$6.7 million.

The 2017 SOCs include a prior years' over-collection adjustment of \$11.6 million. The 2017 SOCs over-collection is primarily due to 2015 actual cost true-ups. Cost recovery of the variable component is determined in the initial invoicing rate calculation prepared in late January each bill year. This process was implemented due to significant variances occurring in water and power operations from initial projections.

The transportation replacement accounting system (RAS) charge is also included in transportation variable OMP&R charge in SOC attachment 5. The RAS charge for 2017 is \$10.3 million, which is \$3.8 million higher than the 2016 SOC. The net increase is primarily driven by increasing cost projections for 2016 and 2017. Cost projections increased for Buena Vista Pumping Plant replacement projects for Units 1 and 7 totaling \$2.64 million in 2016 and \$3.73 million in 2017. Dos Amigos pumping plant cost projections included \$1.0 million for Unit 1 Pole Refurbishment in 2016 and \$5.1 million for Unit 1 Pole and Impeller Refurbishment in 2017. The Pearblossom Unit 3 Impeller Replacement is projected to cost approximately \$1 million in 2016 and \$924 thousand in 2017.

East Branch Enlargement Transportation Charge

The East Branch Enlargement (EBE) capital charges increased \$1.4 million to \$38.6 million for 2017, which can be attributed to a \$1.3 million increase in charges for EBE Phase 1 and an \$80 thousand increase for EBE Phase 2. The increased charges are due to adjustments to the EBE debt service and bond cover schedules for 2017 after the issuance of Series AU bonds.

The Minimum OMP&R EBE Phase 1 charge increased \$4.1 million to \$10.9 million for 2017. The increase is due to the higher cost projections for 2017 calculated component of \$985 thousand and a \$3.16 million increase in prior years' under collection adjustments primarily associated with 2015 actual cost true-ups.

Water System Revenue Bond Surcharge

The Water System Revenue Bond (WSRB) Surcharge for 2017 SOCs increased year over year \$4.5 million to \$86 million, primarily related to a billing process change. Previously, debt service projections for power projects were not included for future years. Utilizing budgets for all SWP divisions, future capital power project projections were isolated and a projected debt service repayment schedule was created to determine the WSRB surcharge in future years.

The capital power projects included in this year's surcharge are:

1. Thermalito Power Plant Clean-up and Recovery
2. FERC Relicensing for P2100 (Oroville)
3. FERC Relicensing for P2426 (Southern California)
4. Hyatt Power Plant Turbine Refurbishment (2, 4, 6)
5. 2014 Hyatt-Thermalito Capital Cost Movement

These power projects account for an increase \$7.5 million in debt service, and are collected under the transportation variable.

In addition to debt service, the power projects have bond cover requirements, which cannot be recovered under transportation variable. In order to meet the requirements, the cover is included in the WSRB surcharge and then will be returned to the SWP Contractors in the 2018 SOC's.

Water System Revenue Bond Issuance

Series AU Water System Revenue Bonds issued \$109.3 million in principal that were incorporated in the calculation of the 2017 SOC's. The total debt service and cover for water system projects, cover for power facilities, and debt service for power facilities needed to meet bond resolution associated with Series AU is \$167 million while the previous bond issuance of Series AT was \$159 million.

Major capitalized projects included in WSRB bond series AU consist of the following:

1. \$53 million for Facility Reconstruction and Improvements
2. \$12 million for Perris Dam Remediation
3. \$10 million for Thermalito Plant Recovery
4. \$10 million Delta Facilities Program
5. \$7.3 million for South Bay Aqueduct Improvements, and
6. \$5.6 million for SWP Protective Relay Replacement

Repayment of Off-Aqueduct Power Facilities

Off-aqueduct power facilities (OAP) costs are charged under terms of the contract amendment signed by SWP Contractors in early 1983. The Department ended the Reid Gardner Unit No. 4 (RG4) contract in July 2013. Additional costs associated with the remediation and separation of the RG4 contract are included in the OAP billing component.

The OAP charge for 2017 is \$4.3 million, which is \$10.8 million lower than the 2016 OAP charge. In June 2016, the Department defeased all remaining OAP bonds totaling \$54.1 million in remaining debt service obligations. The remaining costs to be recovered through the OAP billing component include the annual O&M costs of remaining OAP facilities and RG4 remediation costs. The Department will review OAP facility costs in 2018 and adjust SWP Contractor charges if actual costs are lower than projected in the SOC's. The Department will reallocate 2017 OAP costs in May of 2018 using updated water delivery data.