

## **FY 2009 Customer Five Year Overview**

Customer Form (Estimate) by Project sort by Project Name

			Pri-	RMT	Activity	FY07	FY08	FY09	%	FY10	FY11	FY12	FY13
No.	Activity Name	Act	ority Reiml	Mgt Ofc	Manager	Request	Orig Est	Est.	Change	Est.	Est.	Est.	Est.
1786	6 - CVP, Water and Power Operations (C	VO-1	<i>00</i> )										
1786	- A10 - Water & Energy Management & Develo	opmen	nt										
380	Water Management	W	1 No	CVO-100	Lubas-Willia	998	1,028	1,059		1,092	1,125	1,159	1,194
985	Long-Term Folsom Reoperation - Water And Power Costs	W	2 No	CC-100	Johnson	50	1,000	1,000		1,000	1,000	1,000	1,000
				A10 - Ap	prop Subtotal:	1,048	2,028	2,059		2,092	2,125	2,159	2,19
1786	- A30 - Fish & Wildlife Management & Develop	pment											
2042	Water Management ESA	0	1 No	CVO-100	Lubas-Willia	600	619	638		658	678	699	720
	-			A30 - Ap	prop Subtotal:	600	619	638		658	678	699	720
1786	- A40 - Facilities Operation												
367	Flood Control Intelligence	N	1 Yes	CVO-100	Fujitani	167	172	176		181	186	192	198
370	Water Operations	N	1 Yes	CVO-100	Fujitani	2,384	4,122	4,200		4,326	4,456	4,590	4,728
371	Hydromet	N	1 Yes	CVO-100	Manza	449	539	530		546	562	579	59
377	Power Operations (Operations)	P	1 Yes	CVO-100	Mortimeyer	3,546	3,860	3,961		4,071	4,089	4,212	4,304
378	Power Operation (Ferc)	P	1 No	CVO-100	Mortimeyer	8	8	-		-	-	-	
379	Central Valley Automated Control System (O&M)	P	1 Yes	CVO-100	Domingo-Br	1,522	1,612	1,660		1,708	1,756	1,807	1,858
606	Central Valley Operations Office Security Program	N	1 No	CVO-100	Domingo-Br	454	580	597		613	632	651	670
1110	CVO Decision Support System O&M	N	1 Yes	CVO-100	Domingo-Br	471	553	568		583	600	617	634
				A40 - Ap	prop Subtotal:	9,001	11,446	11,692		12,028	12,281	12,648	12,989
1786	- A50 - Facilities Maintenance & Rehabilitation	ı											
368	Central Valley Automated Control System (Fm&R)	Q	1 Yes	CVO-100	Domingo-Br	384	358	368		378	388	398	408
1109	CVO Decision Support System M&R	Q	1 Yes	CVO-100	Domingo-Br	98	55	49		50	52	53	54
				A50 - Ap	prop Subtotal:	482	413	417		428	440	451	462
1786	- U40 - Facilities Operation												
372	Power Operations (Accounting)	P	1 Yes	CVO-100	Mortimeyer	301	310	319		329	338	349	359
373	Power Operations (Rapid Return To Service)	P	1 No	CVO-100	Mortimeyer	250	250	250		250	250	250	250
374	Power Operations (O&M)	P	1 Yes	CVO-100	Mortimeyer	1,605	1,073	1,100		1,137	1,171	1,206	1,078
375	Power Operations (Chief & Administration)	P	1 Yes	CVO-100	Mortimeyer	243	250	257		265	273	281	289
984	Power Operations (Policy & Administration)	P	1 Yes	CVO-100	Mortimeyer	281	290	299		308	317	327	331
				U40 - Ap	prop Subtotal:	2,680	2,173	2,225		2,289	2,349	2,413	2,31
				1786 - Pr	oject Subtotal:	13,811	16,679	17,031		17,495	17,873	18,370	18,678
					Report Total:	13,811	16,679	17,031		17,495	17,873	18,370	18,678

	Sub	Pri-		RMT	Activity	FY07	FY08	FY09	%	FY10	FY11	FY12	FY13
No. Activity Name	Act	ority	Reimb	Mgt Ofc	Manager	Request	Orig Est	Est.	Change	Est.	Est.	Est.	Est.
				A10 -	Approp Total:	1,048	2,028	2,059		2,092	2,125	2,159	2,194
				A30 -	Approp Total:	600	619	638		658	678	699	720
				A40	Approp Total:	9,001	11,446	11,692		12,028	12,281	12,648	12,989
				A50	Approp Total:	482	413	417		428	440	451	462
				U40 -	Approp Total:	2,680	2,173	2,225		2,289	2,349	2,413	2,313
					Report Total:	13,811	16,679	17,031		17,495	17,873	18,370	18,678



Activity Name: Water Management Activity ID: 380

**Project/Division:** 1786 - CVP, Water and Power Operations (CVO-100) **Subject to Reimbursement:** No

Description of Activity: Fund: A1W

Studies, investigations, forecasts, and preparation of operation of criteria essential to decisions for management of CVP water resources. This will include work leading to revisions of the Coordinated Operations Agreement of (COA). Modifications to Bay-Delta water quality standards and other changes to hydrology in the Central Valley Basin will be analyzed to determine methods to share obligations of the CVP and State Water Project (SWP). The CVP Operations Criteria and Plan will be updated and revised to reflect policies and priorities guiding the multipurpose operation of the project. Annual Operations Plans will be done consistent with the current OCAP. Also the WQCP has periodic reviews and opportunities to review regulatory permits.

#### **Explanation Change from PFY:**

A budget decision was made to separate ESA charges beginning in FY05. In the future we have to update OCAP BA and ESA's BO's with new facilities or operation changes to revise and reflect current facilities and priorities guiding the multipurpose operation of the project. The A10-1786 account water management account was reduced to separate A30 1786 ESA account and other previous A10 account remained.

#### Impact(s) if Unfunded:

Reduced timeliness and accuracy in management of water resources. The reliability of water supply forecasts would be affected. We would be unable to respond fully to stakeholders and customers on impacts and benefits of water management/operations decisions. Without obtaining certainty of CVP obligations and capabilities (yield) in the COA, there would be major disagreement between the United States and the State of California over respective water supplies.

#### **Activity Authorization:**

Reclamation Act of 1902; Reclamation Act of 1939; Flood Control Act of 1944; American River Basin Development Act of 1949; National Environmental Protection Act of 1969; Central Valley Project Improvement Act of 1992



## \*\*\*\*\* ALL DOLLARS IN THOUSANDS \*\*\*\*\*

		Breakdown by Object Code				
Object (	Code	FY09	FY10	FY11	FY12	FY13
1100	Total Salaries & Benefits	597	618	633	654	673
2100	Total Travel	10	11	12	12	13
2400	Printing and Repro	2	2	2	2	2
2500	Other Services	80	82	85	87	90
8126	Regional Indirect Cost	180	184	191	196	202
8128	Office Indirect Cost	190	195	202	208	214
	<b>Total Federal Estimate:</b>	1,059	1,092	1,125	1,159	1,194
	<b>Total Estimate:</b>	1,059	1,092	1,125	1,159	1,194

#### **Object Code Description:**



Activity Name: Long-Term Folsom Reoperation - Water And Power Costs Activity ID: 985

**Project/Division:** 1786 - CVP, Water and Power Operations (CVO-100) **Subject to Reimbursement:** No

Description of Activity: Fund: A1W

In March 1995, Reclamation entered into a contract with the Sacramento Area Flood Control Agency (SAFCA) in which Reclamation agreed to reoperate Folsom Dam and Reservoir to provide 100-year flood control to areas along the lower American River for an interim period which ending on October 31, 1999. That contract was extended in 1999 and in 2000. Congress, in the Water Resources Development Act of 1996 (clarified in Reclamation's Appropriations Act for 2002), directed Reclamation to continue to re-operate the Dam and Reservoir until a comprehensive flood control plan was implemented, and that the local sponsor cost share would be 25%. THIS BAP IS SET UP TO INCLUDE THE WATER REPLACEMENT COSTS RECLAMATION IS REQUIRED TO PAY.

#### **Explanation Change from PFY:**

#### **Impact(s) if Unfunded:**

Reclamation is required by law (WRDA 1996 and Reclamation's Appropriations Act for 2002) to enter into or modify its agreement with the Sacramento Area Flood Control Agency (SAFCA) to purchase the water loss, when available, that would have a significant impact on recreation (impacts defined as an elevation below 435 feet between May 15 and September 15). Reclamation's FY 2002 appropriation bill set the cost sharing of the purchased water at a ratio of 75% Federal and 25% non-Federal. If no funding is set aside to pay Reclamation's cost for this water, when water purchases are required, the 75% Federal share will have to come out of existing funds, impacting Reclamation's operation and maintenance activities.

#### **Activity Authorization:**

Water Resources Development Act of 1996 (clarified in Reclamation's Appropriations Act for 2002)



### \*\*\*\*\* ALL DOLLARS IN THOUSANDS \*\*\*\*\*

		Breakdown by Object Co	ode				
Object C	Code		FY09	FY10	FY11	FY12	FY13
4200	Indemnities		1,000	1,000	1,000	1,000	1,000
	Total Federal Estimate:		1,000	1,000	1,000	1,000	1,000
	<b>Total Estimate:</b>		1,000	1,000	1,000	1,000	1,000

#### **Object Code Description:**



Activity Name: Water Management ESA Activity ID: 2042

**Project/Division:** 1786 - CVP, Water and Power Operations (CVO-100) **Subject to Reimbursement:** No

Description of Activity: Fund: A30

Studies, investigations, forecasts, and preparation of operation of criteria essential to decisions for management of CVP water resources. This will include work leading to revisions of the Coordinated Operations Agreement of (COA). Modifications to Bay-Delta water quality standards and other changes to hydrology in the Central Valley Basin will be analyzed to determine methods to share obligations of the CVP and State Water Project (SWP). The CVP Operations Criteria and Plan will be updated and revised to reflect policies and priorities guiding the multipurpose operation of the project.

#### **Explanation Change from PFY:**

A decision was made to separate ESA related costs in another cost authority beginning in FY05. In the future we have to update OCAP AND ESA with new facilities to revise and reflect current policies and priorities guiding the multipurpose operation of the project.

#### **Impact(s) if Unfunded:**

Reduced timeliness and accuracy in management of water resources. The reliability of water supply forecasts would be affected. We would be unable to respond fully to stakeholders and customers on impacts and benefits of water management/operations decisions. Without obtaining certainty of CVP obligations and capabilities (yield) in the COA, there would be major disagreement between the United States and the State of California over respective water supplies.

#### **Activity Authorization:**

Reclamation Act of 1902; Reclamation Act of 1939; Flood Control Act of 1944; American River Basin Development Act of 1949; National Environmental Protection Act of 1969; Central Valley Project Improvement Act of 1992

A30 1786



# \*\*\*\*\* ALL DOLLARS IN THOUSANDS \*\*\*\*\*

		Breakdown by Object Code				
Object (	Code	FY09	FY10	FY11	FY12	FY13
1100	Total Salaries & Benefits	310	319	328	339	349
2100	Total Travel	10	11	12	12	13
2400	Printing and Repro	2	2	2	2	2
2500	Other Services	126	130	134	138	142
8126	Regional Indirect Cost	93	96	99	102	105
8128	Office Indirect Cost	97	100	103	106	109
	Total Federal Estimate:	638	658	678	699	720
	Total Estimate:	638	658	678	699	720

#### **Object Code Description:**



Activity Name: Flood Control Intelligence Activity ID: 367

**Project/Division:** 1786 - CVP, Water and Power Operations (CVO-100) **Subject to Reimbursement:** Yes

Description of Activity: Fund: A4N

The National Weather Service River Forcast Center (RFC) produces quantitative precipitation forecasts and associated reservoir inflow and stream flow forecasts. Reclamation provides schedules for reservoir operations to the RFC for inclusion in their streamflow forecasts. Reclamation also provides support to the Department of Water Resources Flood Data Committee for collection of flood data during extreme flood events.

#### **Explanation Change from PFY:**

Includes cost of the Department of Water Resources Flood Data Committee.

#### **Impact(s) if Unfunded:**

Flood control and water conservation functions of major CVP reservoir would be compromised.

#### **Activity Authorization:**

Reclamation Act of 1902, Reclamation Project Act of 1939

Flood Control Act of 1944. American River Basin Development Act of 1949; National Environmental Protection Act of 1969; Central Valley Project Improvement Act 1992

A40 1786 8931



## \*\*\*\*\* ALL DOLLARS IN THOUSANDS \*\*\*\*\*

		Breakdown by Object Code				
Object (	Code	FY09	FY10	FY11	FY12	FY13
1100	Total Salaries & Benefits	22	22	23	23	24
2500	Other Services	135	138	140	145	149
2600	Supplies & Materials	2	4	6	6	7
8126	Regional Indirect Cost	8	8	7	8	8
8128	Office Indirect Cost	9	9	10	10	10
	Total Federal Estimate:	176	181	186	192	198
	Total Estimate:	176	181	186	192	198

### **Object Code Description:**



Activity Name: Water Operations Activity ID: 370

**Project/Division:** 1786 - CVP, Water and Power Operations (CVO-100) **Subject to Reimbursement:** Yes

Description of Activity: Fund: A4N

Daily integrated operations scheduling for project facilities for water deliveries, flood control, navigation, instream flows, water temperature control, and salinity control. Reporting, accounting, and data management activities necessary for daily operations. Extensive coordination is required with Area Offices regarding facility outages and other issues affecting water operations. Reimbursement to the State for conveyance of CVP water through State Water Project facilities.

#### **Explanation Change from PFY:**

Cost of other services includes costs for mitigation actions for exporting water in the South Delta. Inability to mitigate for low water levels and water quality could inhibit water supply and result in reduced water allocations. Also includes costs for wheeling CVP water through state system to meet project objectives.

#### **Impact(s) if Unfunded:**

Reduced diligence could lead to operational errors and inefficiency. May fail to meet authorized purposes of the project. Could result in damage to facilities, hazards to the public or environmental losses. Inability to convey water could affect ability to meet GPRA goals to deliver water.

#### **Activity Authorization:**

Reclamation Act of 1902; Reclamation Projects Act of 1939; Flood Control Act of 1944. American River Basin Development Act of 1949; National Environmental Protection Act of 1969; Central Valley Project Improvement Act of 1992;

A40 1786 8827



## \*\*\*\*\* ALL DOLLARS IN THOUSANDS \*\*\*\*\*

		Breakdown by Object Code				
Object (	Code	FY09	FY10	FY11	FY12	FY13
1100	Total Salaries & Benefits	872	898	926	954	983
2100	Total Travel	10	11	11	12	12
2400	Printing and Repro	2	2	1	1	1
2500	Other Services	2,700	2,780	2,864	2,950	3,038
2600	Supplies & Materials	5	6	6	7	7
8126	Regional Indirect Cost	264	270	278	286	295
8128	Office Indirect Cost	347	359	370	380	392
	Total Federal Estimate:	4,200	4,326	4,456	4,590	4,728
-	<b>Total Estimate:</b>	4,200	4,326	4,456	4,590	4,728

#### **Object Code Description:**



Activity Name: Hydromet Activity ID: 371

**Project/Division:** 1786 - CVP, Water and Power Operations (CVO-100) **Subject to Reimbursement:** Yes

Description of Activity: Fund: A4N

The hydromet system provides real-time precipitation, temperature, and snow water content data. This data is used for flood control operations and runoff forecasting. Also, liaison with and administration of cooperative agreement with Snow Surveys, California Department of Water Resources (DWR), for conducting snow surveys at key locations Central Valley watersheds and reporting the data.

#### **Explanation Change from PFY:**

Other services and contracts includes costs to support the California Data Exchange Center. This is a centralized INTERNET data base used by Reclamation as a data source in water supply forecasting and operations. Information is also essential for meeting operational and reporting requirements for endangered species biological opinions.

#### **Impact(s) if Unfunded:**

Flood control and water conservation functions of major CVP reservoirs would be compromised.

#### **Activity Authorization:**

Reclamation Act of 1902 Reclamation Act of 1939 Flood Control Act of 1944 American River Basin Development Act of 1949 National Environmental Protection Act of 1969 Central Valley Project Improvement Act of 1992

A40 1786 8821



# \*\*\*\*\* ALL DOLLARS IN THOUSANDS \*\*\*\*\*

		Breakdown by Object Code				
Object (	Code	FY09	FY10	FY11	FY12	FY13
1100	Total Salaries & Benefits	63	63	67	68	70
2100	Total Travel	6	6	7	6	7
2500	Other Services	330	342	350	360	373
2600	Supplies & Materials	4	4	4	4	4
3100	Equipment	83	86	87	92	93
8126	Regional Indirect Cost	19	19	20	21	22
8128	Office Indirect Cost	25	26	27	28	28
	Total Federal Estimate:	530	546	562	579	597
	Total Estimate:	530	546	562	579	597

#### **Object Code Description:**



Activity Name: Power Operations (Operations) Activity ID: 377

**Project/Division:** 1786 - CVP, Water and Power Operations (CVO-100) **Subject to Reimbursement:** Yes

Description of Activity: Fund: A4P

This Activity provides Regional coordination with Area Offices, the Denver Power Resource Office, Western Area Power Administration, other Reclamation Regions and other federal/state agencies involved in power operations. This activity also provides supervision and staffing of the CVP Operation Center on 24-hour, 7 days a week basis that performs the Region's real-time water and power management activities.

#### **Explanation Change from PFY:**

There is no purchase power or Scheduling/Coordinator Costs now included in this activity. Costs do include about \$525,000 to directly fund the Region's share of the Denver Power Resource Office and Technical Service Center non-direct charged activities.

#### **Impact(s) if Unfunded:**

Essential day -to-day coordination and management of the Region's power and water programs would not be performed. Potential loss of control of river releases, violation of biological opinions and damage to the environment. Power plants currently unstaffed would likely be staffed to operate facilities. Increased cost of water deliveries and loss of ability to serve Reclamation irrigation loads from generation. Energy required to pump water to customers will not be produced or acquired. Delivery of water would cease. Repayment of the project would not be achieved. The ability to pay transmission wheeling to deliver energy to project pump loads would be lost resulting in water movement ceasing. Management/leadership of real time water/power operations would be eliminated. Divisional administrative support activities would not be performed. The relationship with CVP power customers providing increasing amounts of advanced funds for CVP power O&M programs would be lost. Loss of Regional coordination and oversight.

#### **Activity Authorization:**

The Reclamation Act of 1902 Act of August 26,1937 Reclamation Project Act of 1939 Flood Control Act of 1944.

Cost authority numbers:

A40-1786-3327-560-100 Power General A40-1786-3372-556-000 System Control & Load Dispatch

Cost Centers: 2710000, 2710100



## \*\*\*\*\* ALL DOLLARS IN THOUSANDS \*\*\*\*\*

	Br	eakdown by Object Code				
Object C		FY09	FY10	FY11	FY12	FY13
1100	Total Salaries & Benefits	1,846	1,901	1,898	1,956	1,994
2100	Total Travel	48	49	50	52	54
2300	Rent Comm & Util	2	2	2	2	2
2500	Other Services	129	125	128	132	136
253Q	PF-75 Denver	525	541	557	574	591
2600	Supplies & Materials	14	14	17	15	16
3100	Equipment	53	55	56	58	60
8126	Regional Indirect Cost	545	561	560	577	588
8128	Office Indirect Cost	799	823	821	846	863
	Total Federal Estimate:	3,961	4,071	4,089	4,212	4,304
	Total Estimate:	3,961	4,071	4,089	4,212	4,304

#### **Object Code Description:**



Activity Name: Central Valley Automated Control System (O&M) Activity ID: 379

**Project/Division:** 1786 - CVP, Water and Power Operations (CVO-100) **Subject to Reimbursement:** Yes

Description of Activity: Fund: A4P

The Central Valley Automated Control System (CVACS) is a supervisory control and data acquisition (SCADA) system used to operate water and power facilities located in the Central Valley Project (CVP) California to deliver project benefits in a safe, reliable and cost-efficient manner. This activity provides for CVACS operation and maintenance costs at the current level of reliability, capability, and security in compliance with statutory and regulatory requirements. CVACS is physically interfaced with more than 19,000 sensors and equipment controls, power plants, pumping plants and control centers throughout the Central Valley of California. Control center and plant operators initiate control actions through the CVACS display system for hundreds of motors, pumps, generators, valves, electrical switches, circuit breakers and other equipment to generate power and release water to meet daily operations schedules. CVACS also provides the technology tools essential to the real-time coordination of CVP power generation and water releases with interrelated infrastructures operated by other federal, state & local agencies. For example, automatic generation control requires a 4-second data exchange Area Power Administration. Costs include government labor, travel, supplies and equipment to support operation, preventative and breakdown maintenance of SCADA equipment applications or data communications systems, facility controls interface infrastructure, training to maintain skill levels and service vendor support and software license.

#### **Explanation Change from PFY:**

Changes include an estimated 3 percent increase for government labor, vendor support agreements and other costs for data communications service, travel and supplies.

#### **Impact(s) if Unfunded:**

86 percent of the request funds, the direct and indirect labor costs required to operate and maintain the geographically distributed CVP SCADA and data communications equipment, software applications, SCADA equipment interfaces to sensors, meters and facility equipment controls, and data interconnections to other federal, state and local systems. Service agreements with vendors for maintenance support of equipment and software, including license renewals, represent 9 percent of the request and the remaining 5 percent includes annual data communications, travel, supplies and equipment costs. Potential impacts of not funding CVACS O&M activities include: Loss of human capital with specialized knowledge and skills that support the SCADA technology presently in service at control centers, powerplants, and dams of the CVP; deferred system maintenance that could lead to increase risks due to the high rate of new vulnerabilities found in commercial information technology products each year; not meeting FY 2009 performance goals for reliability and efficiency; increased costs in other CVP O&M activities to manually operate facilities, collect, calculate and report reservoir storage, inflows, river releases, water quality and power generation information; decreased availability of automatic generation control and automatic data exchanges with Western Area Power Administration that may result in monetary penalties incurred for noncompliance with electric reliability standards, decreased availability of automatic data exchanges with the California Department of Water Resources, US Army Corps of Engineers, the National Weather Service and the Central Valley Operations Decision Support System. (Note: The FY 2009 present value of tangible benefits provided by CVACS is estimated at \$13 million, depending on hydrologic conditions for an average water year and market rates.)

#### **Activity Authorization:**

The Reclamation Act of 1902; Emergency Relief Appropriation Act of 1935; Public Law 392, Rivers and Harbors Act of 1937; Public Law 868, River and Harbor Act of 1940; Public Law 356, American River Division Authorization Act of 1949; Public Law 84-386, Trinity River Act, 1955; Public Law 87-874, Rivers and Harbors Act of 1962 (Flood Control Act); Fish and Wildlife Coordination Act of 1958; State Water Resources Control board Decision 1379; 1971; Endangered Species Act 1973; State Water Resources Control Board Decision 1485, 1978; Coordinated Operating Agreement (COA) of 1986; Water Rights Order 90-5, 1990; Water Rights Order 91-1, 1991; Public Law 102-575, Central Valley Project Improvement Act (CVPIA) of 1992; Clinger-Cohen Act of 1996; Presidential Decision Directive 63, Critical Infrastructure Protection, May 1998; Public Law 107-347, Title III, Federal Information Security Management Act of 2002; Presidential Directive/HSPD-7, Critical Infrastructure Identification, Prioritization and Protection, December 2003; Energy Policy Act of 2005, Title XII, Electricity; OMB Circular A-130

A40 1786 8823



### \*\*\*\*\* ALL DOLLARS IN THOUSANDS \*\*\*\*\*

	Breal	kdown by Object Code				
Object (		FY09	FY10	FY11	FY12	FY13
1100	Total Salaries & Benefits	884	911	938	967	995
2100	Total Travel	14	15	15	16	16
2300	Rent Comm & Util	42	43	44	45	45
2500	Other Services	157	160	164	166	170
2600	Supplies & Materials	17	17	17	17	18
3100	Equipment	10	10	10	10	11
8126	Regional Indirect Cost	262	270	278	287	293
8128	Office Indirect Cost	274	282	290	299	310
	Total Federal Estimate:	1,660	1,708	1,756	1,807	1,858
	Total Estimate:	1,660	1,708	1,756	1,807	1,858

#### **Object Code Description:**



Activity Name: Central Valley Operations Office Security Program Activity ID: 606

**Project/Division:** 1786 - CVP, Water and Power Operations (CVO-100) **Subject to Reimbursement:** No

Description of Activity: Fund: A4N

Security Program activities include operation and maintenance of security countermeasures, risk-based improvements to security and controls, annual updates of security plans and procedures, incident response and handling, security training in critical infrastructure sector activities, and ongoing monitoring (e.g. annual FISMA security tests and evaluations, periodic Certification and Accreditation, risk assessments, internal control reviews, plans of action and milestones). Costs include: government labor, contracts for Joint Operations Center security guards, agreements for maintenance of equipment and software, supplies, materials and equipment.

#### **Explanation Change from PFY:**

Changes include an estimated 3 percent increase in total costs for government labor, equipment, software and service contracts.

#### **Impact(s) if Unfunded:**

Potential impact of not funding CVO Security Program activities include: Noncompliance with statutory and regulatory requirements that may result in losing authorization to operate critical systems, such as the Central Valley Project SCADA AND Decision support Systems; differed maintenance of security systems that could lead to increased security risks to critical infrastructure assets or decreased availability of information exchanged with other federal, state and local agencies, as well as citizen access to current CVP water and power operations information.

#### **Activity Authorization:**

Public Law 107-347, Title III, Federal Information Security Management Act of 2002; Public Law 100-235, Computer Security Act of 1987; Executive Orders, as amended, 10450, 10577, 12958, 12968; Homeland Security Presidential Directive/HSPD-12 and HSPD-7; Office of Management and Budget Circular A-130, Appendix III; National Institute of Standards and Technology (NIST) Federal Information Processing Standards 199, 200,201; Parts 375, 441 and 444 of the Departmental Manual; Reclamation Manual policy, directives and standards; Homeland Security National Infrastructure Protection Plan, 2006; National Strategy for the Physical Protection of Critical Infrastructures and Key Assets, 2003; National Strategy to Secure Cyberspace, 2003

A40 1786 0100



### \*\*\*\*\* ALL DOLLARS IN THOUSANDS \*\*\*\*\*

		Breakdown by Object Code				
Object (	Code	FY09	FY10	FY11	FY12	FY13
1100	Total Salaries & Benefits	199	205	211	217	224
2100	Total Travel	10	10	11	11	11
2300	Rent Comm & Util	1	-	-	-	-
2500	Other Services	127	131	134	138	143
2600	Supplies & Materials	2	1	1	2	2
3100	Equipment	142	146	151	155	160
8126	Regional Indirect Cost	57	59	61	63	64
8128	Office Indirect Cost	59	61	63	65	66
	Total Federal Estimate:	597	613	632	651	670
-	<b>Total Estimate:</b>	597	613	632	651	670

#### **Object Code Description:**



Activity Name: CVO Decision Support System O&M Activity ID: 1110

**Project/Division:** 1786 - CVP, Water and Power Operations (CVO-100) **Subject to Reimbursement:** Yes

Description of Activity: Fund: A4N

The Central Valley Operations Decision Support System (CVODSS) provides data management, analysis, reporting and modeling tools used to manage the daily operations of the Central Valley Project, California to deliver project benefits in a safe reliable environmentally responsible and cost-efficient manner. This activity provides for the operation and maintenance costs for the current level of reliability, capability and security in compliance with statutory and regulatory requirements. CVODSS is comprised of the Historical Archive and Reports System (HAR) and the Central Valley Operations Scheduling System (CVOSS). HAR is a database management system providing near real-time access to the current conditions and trends of the entire CVP with respect to reservoir levels and inflows, electric power production and status, water quality, pumping quantities and 60 years of historical information to assist operations staff in making effective day-to-day decisions and an electronic logbook of operation status, switching orders, clearances, events, conditions and incidents. CVOSS is the Reclamation component of the joint Western/Reclamation implementation of the VISTA decision support system, which provides a database of hydraulic and power system operating constraints, optimization and simulation capabilities for long-term resource planning and short-term generation scheduling for the CVP. Costs include government labor, travel, data communications, service agreements for maintenance of equipment and software, supplies and equipment.

#### **Explanation Change from PFY:**

Changes include an estimated 3 percent increase in total costs for government labor, equipment, software and service contracts.

#### **Impact(s) if Unfunded:**

Potential impacts of not funding CVODSS O&M activities include: Loss of human capital (3 FTE)that support the databases, models and equipment; increased costs in other O&M activities to manually collect, calculate and enter CVP water and power operations information in other federal and state systems, such as the MP Region CVP Water Operations public web page and the California Data Exchange Center; reduced efficiency and productivity in the data exchange process with the US Army Corps of Engineers, Western Area Power Administration, California Department of Water Resources, Interagency Ecological Program and Reclamations public web server; loss of automated replication process to synchronize Reclamation and Western's data bases; not meeting FY 2009 performance goals for efficiency.

#### **Activity Authorization:**

The Reclamation Act of 1902; Emergency Appropriation Act of 1935; Public Law 392; Rivers and Harbors Act of 1937; Public Law 868, River and Harbors Act of 1940; Public Law 356, American River Division Authorization of 1949; Public Law 84-386, Trinity River Act 1955; Public Law 87-874, Rivers and Harbors Act of 1962 (Flood Control Act); Fish and Wildlife Coordination Act of 1958; State Water resources Control Board Decision 1379, 1971; Endangered Species Act of 1973; State Water Resources Control Board Decision 1485. 1978; Coordinated Operating Agreement (COA) of 1986; Water Rights Order 90-5, 1990; Water Rights Order 91-1, 1991; Public Law 102-575, Central Valley Project Improvement Act (CVPIA) of 1992; Clinger-Cohen Act of 1996; Presidential Decision Directive 63, Critical Infrastructure Protection, May 1998; Public Law 107-347, Title III, Federal Information Security Management Act of 2002; Homeland Security Presidential Directive/HSPD-7, Critical Infrastructure Identification, Prioritization, and Protection, December 2003; Energy Policy Act of 2005, Title XII, Electricity; Office of Management and Budget A-130

A40-1786-8826



## \*\*\*\*\* ALL DOLLARS IN THOUSANDS \*\*\*\*\*

		Breakdown by Object Code				
Object C	Code	FY09	FY10	FY11	FY12	FY13
1100	Total Salaries & Benefits	286	294	304	313	322
2100	Total Travel	1	1	1	1	1
2300	Rent Comm & Util	5	5	5	5	5
2500	Other Services	102	104	106	109	111
3100	Equipment	2	2	2	2	2
8126	Regional Indirect Cost	85	87	90	92	95
8128	Office Indirect Cost	87	90	92	95	98
	Total Federal Estimate:	568	583	600	617	634
	<b>Total Estimate:</b>	568	583	600	617	634

#### **Object Code Description:**



Activity Name: Central Valley Automated Control System (Fm&R) Activity ID: 368

**Project/Division:** 1786 - CVP, Water and Power Operations (CVO-100) **Subject to Reimbursement:** Yes

Description of Activity: Fund: A5Q

The Central Valley Automated Control System (CVACS) is a supervisory control and (SCADA) system used to operate water and power facilities located in the Central Valley Project (CVP) in California to deliver project benefits in a safe, reliable and cost-efficient manner. This activity provides for the replacement and service of the SCADA equipment and software in CVACS to improve reliability, performance, or enhance capabilities to meet the requirements of new or revised business processes for water and power operations. CVACS provides remote plant control for the generators, gates, outlet valves and auxiliary equipment of the powerplants, dams and temperature control devices, monitoring of water release and power generation processes, water quality monitoring, as well as automated data exchange with federal, state and local agencies. As facility equipment changes due to maintenance, replacement, or uprates, the physical and cyber interfaces between the SCADA system and equipment has to be upgraded in order to safely operate modified facility infrastructure. The service life of commercial information technology products used in CVACS is 3 to 4 years government labor, travel, service agreement and contracts for training, upgrades, improvement of replacements or replacement of SCADA modules, software components and equipment.

#### **Explanation Change from PFY:**

Changes include an estimated 3 percent increase in total cost for government labor, equipment, software and service contracts.

#### **Impact(s) if Unfunded:**

Potential impacts of not funding the replacement and service of SCADA equipment and software include: deferred maintenance that could result in not meeting FY 2009 performance goals for reliability and efficiency; increased risks due to the use of non-supported equipment or software in a mission system; delayed modification or addition of functional capabilities needed to implement changes to CVP power or water operations to meet new statutory or regulatory requirements.

#### **Activity Authorization:**

The Reclamation Act of 1902; Emergency Relief Appropriation Act of 1935; Public Law 392, Rivers and Harbors Act of 1937; Public Law 868, Rivers and Harbors Act of 1940; Public Law 356, American River Division Authorization Act of 1949; Public Law 84-386, Trinity River Act, 1955; Public Law 87-874, Rivers and Harbors Act of 1962 (Flood Control Act); Fish and Wildlife Coordination Act of 1958; State Water Resources Control Board Decision 1379, 1971; Endangered Species Act of 1973; State Water Resources Control Board Decision 1485, 1978; Coordinated Operating Agreement (COA) of 1986; Water Rights Order 90-5, 1990; Water Rights Order 91-1, 1991; Public Law 102-575, Central Valley Project Improvement Act (CVPIA) of 1992; Clinger-Cohen Act of 1996; Presidential Decision Directive 63, Critical Infrastructure Protection, 1998; Public Law 107-347, Title III, Federal Information Security Management Act of 2002; Homeland Security Presidential Directive/HSPD-7, Critical Infrastructure Identification, Prioritization and Protection, December 2003; Energy Policy Act of 2005, Title XII, Electricity; Office of Management and Budget Circular A-130.

A50 1786 8823



## \*\*\*\*\* ALL DOLLARS IN THOUSANDS \*\*\*\*\*

Breakdown by Object Code						
Object C	Code	FY09	FY10	FY11	FY12	FY13
1100	Total Salaries & Benefits	142	147	151	156	160
2100	Total Travel	4	4	4	4	4
2500	Other Services	80	81	83	85	87
2600	Supplies & Materials	3	4	4	4	4
3100	Equipment	53	54	55	56	57
8126	Regional Indirect Cost	42	43	45	46	47
8128	Office Indirect Cost	44	45	46	47	49
	Total Federal Estimate:	368	378	388	398	408
	<b>Total Estimate:</b>	368	378	388	398	408

#### **Object Code Description:**



Activity Name: CVO Decision Support System M&R Activity ID: 1109

**Project/Division:** 1786 - CVP, Water and Power Operations (CVO-100) **Subject to Reimbursement:** Yes

Description of Activity: Fund: A5Q

The Central Valley Operations Decision Support System (CVODSS) provides data management, analysis, reporting and modeling tools used to manage the daily operations of the Central Valley Project (CVP), California, to deliver project benefits in a safe, reliable, environmentally responsible and cost-efficient manner. This activity provides for the replacement and service of CVODSS equipment and software to improve reliability, performance, or enhance capabilities to meet the requirements of revised business processes for CVP water and power operations. CVODSS is comprised of the Historical Archive and Reports System (HAR) and the Central Valley Operations Scheduling System (CVOSS). HAR is a database management system providing near real-time access to the current conditions and trends of the entire CVP with respect to reservoir levels and inflows, electric power production and status, water quality, pumping quantities and 60 years of historical information to assist operations staff in making effective day-to-day decisions. CVOSS is the Reclamation component of the joint Western/Reclamation implementation of the CVP VISTA decision support system, which provides a database of hydraulic and power system operating constraints, optimization and simulation capabilities for long-term resource planning and short-term generation scheduling for the CVP. Costs include government labor, contracts to support improvements reliability, functionality or performance and equipment.

#### **Explanation Change from PFY:**

Changes include an estimated increase in total costs for government labor, equipment, software and service contracts.

#### **Impact(s) if Unfunded:**

Potential impacts of not funding CVODSS M&R activities include: 1) Replacement of servers with 3 year service life will not be funded, which will result in decreasing system performance, increasing vulnerability to cyber-threats, and reducing operational efficiencies; 2) Major modification or improvements to CVODSS functional capabilities will not be funded, which will impact decision-maker efficiency and productivity potentially affecting the achievement of FY 2009 performance goals.

#### **Activity Authorization:**

The Reclamation Act of 1902; Emergency Relief Appropriation Act of 1935; Public Law 392; Rivers and Harbors Act of 1937; Public Law 868, River and Harbors Act of 1940; Public Law 356, American River Division Authorization Act of 1949; Public Law 84-386, Trinity River Act 1955; Public Law 87-874, Rivers and Harbors Act of 1962 (Flood Control Act); Fish and Wildlife Coordination Act of 1958; State Water Resources Control Board Decision 1379, 1971; Endangered Species Act of 1973; State Water Resources Control Board Decision 1485, 1978; Coordinated Operating Agreement (COA) of 1986; Water Rights Order 90-5, 1990; Water Rights Order 91-1, 1991; Public Law 102-575, Central Valley Project Improvement Act (CVPIA) of 1992, Clinger-Cohen Act of 1996; Presidential Decision Directive 63, Critical Infrastructure Protection, May 1998; Public Law 107-347, Title III, Federal Information Security Management Act of 2002; Homeland Security Presidential Directive/HSPD-7, Critical Infrastructure Identification Prioritization and Protection, December 2003; Energy Policy Act of 2005, Title XII, Electricity, Office of Management and Budget Circular A-130

A50-1786-8825



## \*\*\*\*\* ALL DOLLARS IN THOUSANDS \*\*\*\*\*

		Breakdown by Object Code				
Object (	Code	FY09	FY10	FY11	FY12	FY13
1100	Total Salaries & Benefits	14	15	15	15	16
2100	Total Travel	1	1	1	1	1
2500	Other Services	25	26	26	27	27
3100	Equipment	1	-	_	-	-
8126	Regional Indirect Cost	4	4	5	5	5
8128	Office Indirect Cost	4	4	5	5	5
	Total Federal Estimate:	49	50	52	53	54
	Total Estimate:	49	50	52	53	54

#### **Object Code Description:**



**Activity ID:** Power Operations (Accounting) **Activity Name:** 

**Project/Division:** 1786 - CVP, Water and Power Operations (CVO-100) **Subject to Reimbursement:** Yes

**Description of Activity: Fund:** U4P

This activity plan includes labor, training and associated overhead for 2.0 FTE for accountants and accounting technician. These personnel are dedicated 100% to various financial accounting matters related to water/power scheduling and execution of the Funding Agreement with the power customers.

#### **Explanation Change from PFY:**

Change from prior year is minor (with in 3%) and is primarily a result of inflation.

#### **Impact(s) if Unfunded:**

If this activity was not fully funded the activities of the two accountants and accounting technician, whose activities are most prominent being the Power O&M dedicated 100% to power financial management activities, would be reduced accordingly. Other activities include re-operation, project use load cost analysis, inter agency billing, maintenance cost accounting, government performance indicator analysis, trust fund activities accounting, and special projects. A significant amount of workload for these accounting personnel in dedicated to the Power O&M Funding Agreement to which Reclamation is a partner, and as such is required to perform all of the necessary activities associated with this Agreement (budgeting, accounting, reporting, participation in the Finance Committee, attendance at Governance Board Meetings to represent Reclamation, etc.) Should funding be reduced, the activities necessary to participate as a partner of this Agreement would be reduced, thereby impacting Reclamation's ability to obtain critically needed funding from the CVP Power Customers for the operations and maintenance of the CVP.

A reduction in funding of this activity may result in less accurate and late issuance of the annual CVP Water rates.

#### **Activity Authorization:**

The Reclamation Act of 1902; Act of August 26, 1937; Reclamation Project Act of 1939; Flood Control Act of 1944



## \*\*\*\*\* ALL DOLLARS IN THOUSANDS \*\*\*\*\*

		Breakdown by Object Code				
Object (	Code	FY09	FY10	FY11	FY12	FY13
1100	Total Salaries & Benefits	179	183	189	197	201
2100	Total Travel	3	3	3	3	4
2500	Other Services	7	9	8	8	8
8126	Regional Indirect Cost	53	54	56	57	59
8128	Office Indirect Cost	77	79	82	84	87
	Total Federal Estimate:	319	329	338	349	359
	Total Estimate:	319	329	338	349	359

### **Object Code Description:**



Activity Name: Power Operations (Rapid Return To Service) Activity ID: 373

**Project/Division:** 1786 - CVP, Water and Power Operations (CVO-100) **Subject to Reimbursement:** No

**Description of Activity:** Fund: U4P

This activity provides for labor and equipment needed to rapidly return to service any generator or related power equipment that otherwise becomes inoperable.

#### **Explanation Change from PFY:**

No change from prior year.

#### **Impact(s) if Unfunded:**

N/A

#### **Activity Authorization:**

Reclamation Act of 1902 Act of August 26, 1937 Reclamation Projects Act of 1939 Flood Control Act of 1944

U4P-1786 3300



## \*\*\*\*\* ALL DOLLARS IN THOUSANDS \*\*\*\*\*

Breakdown by Object Code								
Object C	Code		FY09	FY10	FY11	FY12	FY13	
2500	Other Services		250	250	250	250	250	
	Total Federal Estimate:		250	250	250	250	250	
	Total Estimate:		250	250	250	250	250	

#### **Object Code Description:**



Activity Name: Power Operations (O&M) Activity ID: 374

**Project/Division:** 1786 - CVP, Water and Power Operations (CVO-100) **Subject to Reimbursement:** Yes

Description of Activity: Fund: U4P

This activity Plan provides Region-wide coordination and technical support related to the operations and maintenance of CVP hydroelectric power related facilities including excuting the review program. This activity assures that Region-wide power program goals and objectives consistent with Reclamation-wide standards and operational practices are met. The activity provides Regional professional engineering expertise and coordination with Area Offices, the Denver Power Resource Office, Western Area Power Administration, other Reclamation Regions and other federal/state agencies involved in power operations.

#### **Explanation Change from PFY:**

Change from prior year is minor (within 3 percent) and is primarily a result of inflation.

#### **Impact(s) if Unfunded:**

Coordination of the Region's power and water operation and maintenance management program would be lost. Centralized professional staffing expertise in power facilities would be eliminated. Increased occurrences and duration of generator and pumping plant unit outages would result in lost power generation or fore gone opportunities to pump water. Longer time periods would be needed to repair equipment and restore service. Increased overall maintenance costs. Without funding, it would be necessary for individual area offices to either increase staffing within their respective area offices or increase their operating costs by hiring consultant services.

#### **Activity Authorization:**

Reclamation Act of 1902, Act of August 26, 1937, Reclamation Projects Act of 1939, Flood Control Act of 1944

U4P 1786 3327 560 600



## \*\*\*\*\* ALL DOLLARS IN THOUSANDS \*\*\*\*\*

Breakdown by Object Code							
Object (	Code	FY09	FY10	FY11	FY12	FY13	
1100	Total Salaries & Benefits	601	621	640	658	584	
2100	Total Travel	37	38	38	41	42	
2500	Other Services	25	26	27	28	28	
8126	Regional Indirect Cost	177	183	189	194	172	
8128	Office Indirect Cost	260	269	277	285	252	
	Total Federal Estimate:	1,100	1,137	1,171	1,206	1,078	
	Total Estimate:	1,100	1,137	1,171	1,206	1,078	

### **Object Code Description:**



Activity Name: Power Operations (Chief & Administration) Activity ID: 375

**Project/Division:** 1786 - CVP, Water and Power Operations (CVO-100) **Subject to Reimbursement:** Yes

Description of Activity: Fund: U4P

Activity provides supervision, support and programmatic oversight of 28 FTE's performing Region-wide coordination and technical support related to the CVP hydroelectric power management program. This supervision and oversight assures that Region-wide power program goals and objectives are consistent with Reclamation-wide standards and operational practices. The activity provides coordination with Area Offices, Denver Power Resources Office, Western Area Power Administration, other Reclamation Regions and other federal/state agencies involved in power operations. This activity also is the primary interface with CVP power customer groups providing advance funding of Region's power programs activities. Also provides supervision of the 24-hour CVP Operation Center responsible for performing real-time water and power management activities.

#### **Explanation Change from PFY:**

Change from prior is minor (with in 3%) and is primarily a result of inflation.

#### **Impact(s) if Unfunded:**

Coordination of the Region's power and water management program would be lost. Management/leadership of real time water/power operations would be eliminated. The relationship with CVP power customers providing increasing amounts of advanced funds for CVP power O&M would be lost. Divisional administrative support activities would not be performed.

#### **Activity Authorization:**

Reclamation Act of 1902 Act of August 26, 1937 Reclamation Project Act of 1939 Flood Control Act of 1944

U4P 1786 3327 560 600



## \*\*\*\*\* ALL DOLLARS IN THOUSANDS \*\*\*\*\*

Breakdown by Object Code							
Object (	Code	FY09	FY10	FY11	FY12	FY13	
1100	Total Salaries & Benefits	142	147	152	156	161	
2100	Total Travel	4	4	4	4	4	
2500	Other Services	7	7	7	8	8	
8126	Regional Indirect Cost	42	43	45	46	47	
8128	Office Indirect Cost	62	64	65	67	69	
	Total Federal Estimate:	257	265	273	281	289	
	Total Estimate:	257	265	273	281	289	

### **Object Code Description:**



Activity Name: Power Operations (Policy & Administration) Activity ID: 984

**Project/Division:** 1786 - CVP, Water and Power Operations (CVO-100) **Subject to Reimbursement:** Yes

Description of Activity: Fund: U4P

This activity provides strategies and recommendations to senior Reclamation management on Region-wide policy related to the CVP hydroelectric power management program. This supervision and oversight assures that Region-wide power program policies are consistent with Reclamation-wide policies and consistent with authorizing legislation. The activity provides Regional coordination with Area Offices, the Denver Power Resource Office, Western Area Power Administration, other Reclamation Regions, and other federal/state agencies involved in power policy.

#### **Explanation Change from PFY:**

Change from prior year is minor (within 3%) and is primarily a result of inflation.

#### **Impact(s) if Unfunded:**

This activity is primarily FTE related expenses. It being unfunded would result in a loss of Regional coordination and oversight of power policy related issues that could result in conflicting and costly power related agreements/contracts, lack of review of power related legislation, lost revenue opportunities and potential opportunities for inadvertent cost shifts between water/power customers.

#### **Activity Authorization:**

Reclamation Act of 1902 Act of August 26, 1937 Reclamation Projects Act of 1939 Flood Control Act 1944

A40 1786 3327 560 500



## \*\*\*\*\* ALL DOLLARS IN THOUSANDS \*\*\*\*\*

Breakdown by Object Code						
Object C		FY09	FY10	FY11	FY12	FY13
1100	Total Salaries & Benefits	63	65	66	68	70
2100	Total Travel	2	2	2	2	2
2500	Other Services	9	9	10	10	10
253Q	PF-75 Denver	180	185	-	-	-
8000	Allots, Advncmnts,& Other Credits	-	-	191	197	203
8126	Regional Indirect Cost	18	19	20	20	22
8128	Office Indirect Cost	27	28	28	30	30
	Total Federal Estimate:	299	308	317	327	337
<u> </u>	Total Estimate:	299	308	317	327	337

#### **Object Code Description:**