

Central Valley Project Customer O&M Funding Program

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Central Valley Project Power Overview

- 11 powerplants in northern / central California
- 2,100 MW of installed capacity
- 3200 GWh average annual energy net of project use to preference load
- 80 customers have 20-year Base Resource Contracts with a percentage of CVP generation
- Supplemental purchased power is optional on an individual customer pass-through cost basis



O&M Funding Agreement

- Since 1997, provides secure funding for O&M of Western and Reclamation CVP facilities and for selected capital projects
- Customers and Agencies prioritize work and projects through a Governance Board that approves plans
- Customers advance funds for annually expensed O&M and certain capitalized projects
- Customers receive credit on subsequent power bills for funds advanced
- Technical Committee develops Customer Funding Plans for Governance Board approval 4 years out

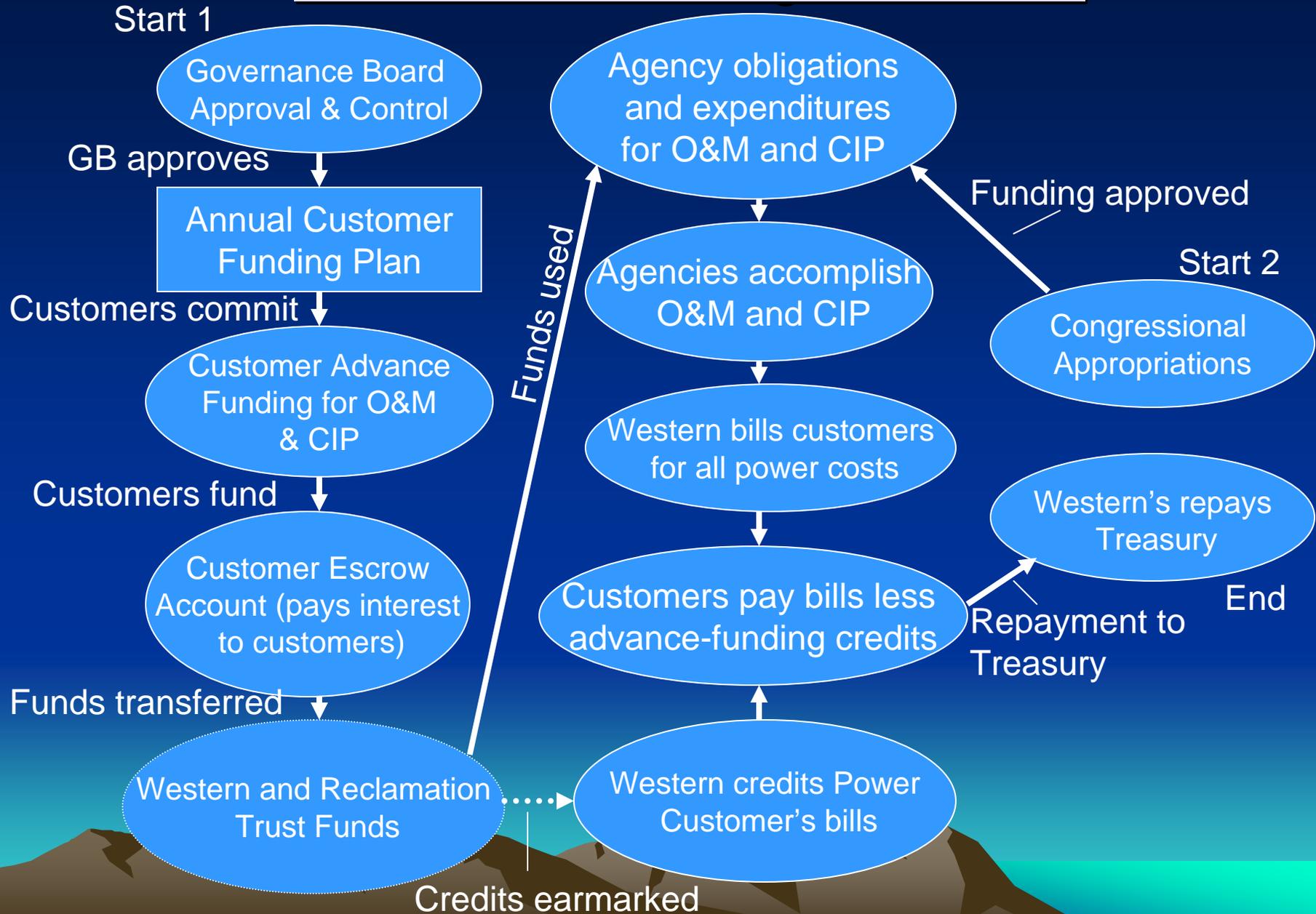


Governance Board

- 10 Customer, 1 Reclamation, 1 Western representatives
- 2/3 of customers, Reclamation, & Western needed to approve Preliminary Funding plans 4 years in advance
- Final Funding Plan defaults to 75% of that fiscal year's Preliminary Funding Plan if an affirmative vote on Final Funding Plan is not reached 1 year in advance



Customer Funding Flowchart



Examples of Accomplishments

- Rewind and runner replacements on Shasta generators with a 4% efficiency gain (80 GWh average year) and 85 MW more capacity
- Runner replacements on New Melones generators to repair cavitation and improve efficiency
- Increased stability of maintenance work
- Shasta Switchyard converted to double-breaker double-bus
- Additional Gen Tie Line to New Melones Power Plant
- Generator upgrades to DC excitation and digital governors, relays, circuit breakers



Selected Customer Funded Projects Reclamation (in \$000)

Project	Yr	Amt \$000	Description
Batt & Solid State Relays	02	844	Replaced out-of date battery backs and charges; improved reliability of DC systems
Software & Digital Governors	03	3291	Replaced old mechanical governors; purchased new scheduling and accounting software
Excitation Systems	07 & 08	2000	Replaced out-of date mechanical/electrical Excitation Systems
Shasta DBDB	07	1236	Reconfigure Shasta Switch station for greater reliability of the Federal Sub BA Area
Rewinds and Runners	02-13	42700	Rewind Stator Windings, and replace old cast-iron runners with high efficiency ones



Selected Customer Funded Projects Reclamation Continued (in \$000)

Project	Yr	Amt \$000	Description
Shasta Grd Sw & Buss	08	1000	Repair damaged ground switch and 13.8 kV buss.
CVACS	08	805	Update remote control and data acquisition systems
Overhaul Shasta Sta Service Units	07 - 08	500	Refurbishment of small hydro units used I black starting PP.
Subtotal - USBR		\$157M	



Selected Customer Funded Projects Western (in \$000)

Project	Yr	Amt \$000	Description
NM Gen Tie	07-08	5800	New Tie Line to reduce single largest contingency
Shasta DBDB	07-08	6800	Reconfigure Shasta Switch station for greater reliability of the Federal Sub BA Area.
Folsom Loop	08	5100	Tying existing overhead 230 kV line into Folsom Substation to increase reliability & voltage support.
SVS	08-10	57000	New Double Circuit 230 kV line to increase system reliability and voltage support of Sacramento area.
Subtotal - WAPA		\$96 M	
Total USBR & WAPA		\$253 M	



Customer Funding v. Total O&M Costs of CVP (\$M)

	FY06	FY07	FY08	FY09	FY10	FY11
Reclamation Total O&M	34	34	34	37	39	42
Customer Funded O&M/ percent	27 79%	27 79%	24 71%	32 86%	32 82%	35 83%
Western Total O&M	41	43	56	53	54	55
Customer Funded O&M/ percent	6 15%	6 14%	17 30%	25 47%	25 46%	25 45%

Conclusions

- Advanced funding by CVP power customers improves stability of federal hydropower and transmission facility maintenance over appropriations alone
- Improvements and betterments are also accomplished with advanced funding that would not be with only appropriations
- Customers share control of O&M program which is not achieved in diversion of receipts
- Governing Board always reaches consensus on funding plan – default to 75% of prior year's plan never triggered

