## **CVP Power Initiative Implementation Plan**

Last Revised: October 18, 2019 - (120-day Status Report)

Milestone	Action	Target Completion	Status	Comp
I. Reporting	and Implementation			
(I).1.a Provid	e a report of implementation to the Commissioner and Deputy Commissioners.			
			Reclamation provided a coordinated action plan, complete with milestones, tasks and target	
			completion dates for each directive on August 23. All information can be found here	
	Develop a schedule with reporting milestones within 60 days of memo.	8/23/2019	https://www.usbr.gov/mp/hydro.html.	_
(I).1.b Provid	e an implementation status report to the Commissioner and Deputy Commissioners.			
	Provide an implementation status report of the action plan within 120 days of memo.	10/23/2019	This revised plan as of October 18, 2019 is the 120-day status report.	
	Provide a status report every 6 months.	4/20/2020	, , , , , , , , , , , , , , , , , , ,	
	Provide a status report every 6 months.	10/16/2020		
	Provide a status report every 6 months.	4/15/2021		
	Provide a status report every 6 months.	10/12/2021		1
	Provide a status report every 6 months.	4/8/2022		
II Impleme	ntation - Cost Stability - Predictability and Transparency			
II. IIIIpieiliei				
(II).1.a Work	with customers, WAPA and project proponent for Sites/North-of-Delta Off-Stream Storage (NODOS)	Project on hydropowe	 r purpose analysis.	
	Discuss analysis of benefits, costs, and financial impacts associated with the draft feasibility report's			
	inclusion of a hydropower purpose to the proposed Sites/NODOS project with power customers at		Discussion Initiated in January 2019 customer meeting and ongoing per customer request to	
	Power Customer Coordination Committee (CCC) meeting.	1/15/2019	receive updates.	
	Draft Lt-gen hydropower purpose analysis for Sites/NODOS project discussion with power			
	preference customers.	2/11/2013	Updates to be provided at next CCC meeting.	
	Submit administrative Final Feasibility Report to Commissioner's Office.	10/31/2020		
	Submit administrative Final Environmental Impact Statement to Commissioner's Office.	10/31/2020		
	Participate in regular calls and discussions with Joint Power Authority to develop operations plan	0	Destining time in Description Committee and Executive Committee and the committee an	
	proposal.  Work with WAPA, customers and project proponents to finalize operations plan after determination	Ungoing	Participating in Reservoir Committee and Executive Committee meetings.  Schedule will be created after determination of Feasibility; Principles of Operation and basic	
	of feasibility.	TBD	guidelines include no harm to CVP Operations	
(II).1.b Comm	nunicate any modifications to the benefits analysis in the NODOS Feasibility Report to power custom	ers and appropriate sta	akeholders.	
	Draft Lt-gen benefits analysis for Sites/NODOS project for discussion with power preference	2/44/2040	Undetecte he provided at payt CCC reseting	
	customers.		Updates to be provided at next CCC meeting.	
	Submit administrative Final Feasibility Report to Commissioner's Office.	10/31/2020		_
	Submit administrative Final Environmental Impact Statement to Commissioner's Office.	10/31/2020		
	Participate in regular calls and discussions with Joint Power Authority to develop operations plan			
	proposal.	Ongoing	Participating in Reservoir Committee and Executive Committee meetings.	
	Work with WAPA, customers and project proponents to finalize operations plan after determination		Schedule will be created after determination of Feasibility; Principles of Operation and basic	
	of feasibility.	TBD	guidelines include no harm to CVP Operations	

	Provide Shasta Dam Raise updates at WAPA CCC meeting to ensure benefits, costs, and financial impacts associated with the draft Feasibility Report's inclusion of a hydropower purpose to the			
	proposed project are analyzed, evaluated, and considered as the project moved forward.	8/22/2019	Complete.	
	Lt-gen corrections for power benefits due/to-be-completed.	11/1/2019	LT-Gen and PLEXOS models continue to be analyzed by Reclamation.	
	Contract to be awarded to provide additional PLEXOS runs to improve hydropower benefits	11/1/2013		
	analysis.	11/1/2020	Contract awarded. Complete.	
	Complete revised benefits analysis.	12/31/2019	Benefits analysis will be provided at the power customer meeting following completion.	
(II).1.d W	ork with preference power customers and WAPA as appropriate on other feasibility studies.			
	Discuss as a part of Reclamation's "Power Update" at all Power Customer CCC meetings to ensure		As reported at the power update provided at the October 10, 2019 CCC meeting, a Reclamation	
	the benefits, costs, and financial impacts associated with the inclusion of a hydropower purpose for		team has actively been analyzing the models LT Gen and Plexos to assess the level of accuracy	
	proposed projects are analyzed, evaluated, and considered as projects move forward.	Ongoing	appropriate for feasibility studies.	
(II).1.d.1 I	 	 th power customers, '		
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	Modify appropriate internal directives to include outreach for stakeholders and power marketing			
	agencies. Determine if additional outreach is required before feasibility is determined and add to		Following release of Appraisal Study D&S (CMP 09-01) and Planning Policy (CMP P09), Reclamation	
	appropriate directives and standards (if not already included).	7/31/2020	will begin updates to CMP 09-02 in 2019.	
	Reclamation's Planning Office (MP-700) will begin coordination and development of detailed			
	operations plan if and when feasibility is appropriately determined and Congressional authorization			
	is provided for a project.	Ongoing	Work will occur if/when feasibility is determined for any proposed project.	
(II). 1.e De	 evelop a Standard Operating Procedure (SOP) to document methodology and procedures for construction (	cost recovery.		
		•	Reclamation met with the CVP FAC and determined the SOP will document what Reclamation will	
	Meet with CVP Financial Affairs Committee (FAC) to determine items for SOP.	7/19/2019	do to ensure repayment is accomplished by 2030.	
	Develop draft SOP within 60 days of meeting with FAC.	9/17/2019	An SOP has been drafted and is under internal review.	
	Share draft SOP at next FAC meeting.	9/20/2019		
	Share draft SOP at WAPA CCC Customer Meeting.	10/10/2019		
(II).1.f De	velop aid-to-irrigation document for Water Infrastructure Improvement for the Nation (WIIN) Act projects.	<u> </u>		
			Reclamation provided a presentation on and consulted with water and power stakeholders on	
	Develop document describing handling of aid-to-irrigation for WIIN Act construction prepayment		TRMR #122, which was then finalized August 2019. The document can be found here:	
	and new construction projects funded under WIIN authorities within 60 days of memo.	8/28/2019	https://www.usbr.gov/recman/temporary_releases/pectrmr-122.pdf	
(II).1.g Sh	are the SOP documenting the methodology for treatment of non-permanent revenue.			
<del>-</del>	Share draft SOP with customers at customer CCC meeting.	10/10/2019	An SOP has been drafted and is under internal review.	
	Discuss two finalized SOPs with power customers at CCC meeting.	10/10/2019	To be shared at a CCC meeting following internal review of the SOP.	
	Finalize SOP, which identifies (a) what this revenue represents (definition of this water), (b) the			-
	justification for the accounding process, and (c) description of the rate-setting schedules.	11/1/2019		
	Review the guidelines annually.	11/1/2020		
/II\ 1 b \ \//	ork with WAPA to maintain 10-year forecast of capital improvements. Review with customers at Technical	L Committee Meeting		
(11 <i>]</i> 1. ± . 111 VV	The with war A to maintain 10-year lorecast of capital improvements. Review with customers at Technical	Committee Meeting	3-1	
	Complete 10-year forecast of capital improvements for CVP power infrastructure.	8/6/2019	Complete and ongoing revisions tied to each MMPPC meeting.	
	Reclamation provided a presentation and an opportunity to review the 10-year forecast with CVP		This was provided at the MMPPC and Technical Committee Meeting and finalized August 2019	
	customers at Technical Committee Meetings.	8/6/2019	Complete and ongoing.	
	Update 10-year forecast annually.		For latest updates, please contact Steve Melavic at smelavic@usbr.gov.	

Reclamation will seek customer and stakeholder input on appropriate variance percentag	ge		
threshold.		Coordinate variance percentage determination with WAPA, power customers and stakeholders.	
Determine appropriate variance percentage threshold between budgeted and actual exp	enditures		
for transparency of multipurpose O&M and construction costs.	1/13/2020		
Document and share variance percentage commitment with power customers.	6/1/2020	This information will be shared at CCC meeting.	
(II).1.j Implement benchmarking of CVP hydropower data and share annually.			
		Reclamation continues to develop this report and will share when completed. Suggested metrics	
Prepare preliminary report outling results of cost and operational data for CVP generators	rs. 10/31/2019	for the data shared with customers via email.	
Share results with Reclamation management and power customers.	10/31/2019	Results will be shared at customer meeting following completion.	
Prepare and share report with Reclamation management and power customers annually.	. 10/31/2020	Results will be shared at CCC meetings annually.	
III. Implementation - Lost Production Opportunities			
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(III).1.a Use best available science with plant bypass operations.			
		Reclamation will continue to coordinate with the groups to use data for decision-making and to	
Coordinate with the American River and Sacramento River groups when evaluating powe	•	incorporate real-time monitoring into decisions. Updates from these meetings are provided during	
bypass operations for species mitigation.	Ongoing	customer meetings.	
		Reclamation will continue to coordinate with the groups when appropriate to ensure use of best	
Coordinate with American River and Sacramento River groups to ensure use of best available.	able	available science with plant bypass operations. Updates from these meetings are provided during	
science with plant bypass operations.	Ongoing	customer meetings.	
(III) 4 1			
(III).1.b Coordinate with WAPA fisheries biologist in adaptive management committees.			
Invite WAPA biologist to tour the Central Valley Office control center and provide an over CVO operations.	rview of 4/26/2019	Complete.	4/2
Invite WAPA fisheries biologist to attend adaptive management committess (American Ri	iver Group		
and Sacramento River Temperature Task Group) to help ensure requests for power bypas	•		
		Any information from those meetings is undated through WARA's channels	6.1
operations are supported by best available science.	6/20/2019	Any information from those meetings is updated through WAPA's channels.	6/
(III).1.c Review Shasta Water Control Manual (WCM) potential.			
Reclamation will evaluate the forecast-informed reservoir operations when the U.S. Army	y Corps of		
Engineers opens this process for comment.	Ongoing	This action will occur when the U.S. Army Corps of Engineers initiaties revisions to the WCM.	
(III) 1 d. Provide undates on flood control enerations			
(III).1.d Provide updates on flood control operations.		Flood operations updates are now included in the weekly status report to power	
Include flood operations updates in the weekly status reports to power customers.	8/30/2019	customers when in flood operations.	8/
instance mode operations aparates in the weekly states reports to power customers.	3,33,2313	editerriers when in need operations.	5,
Discuss as a part of Reclamation's "Power Update" at all Power Customer CCC meetings.	Ongoing		
(III).1.e CVP Hydropower Outage Scheduling - Framework at Maintenance and Major Project Planning	Committee (MMPPC)		
Inform customers about the concepts adopted in the CVP Hydropower Outage Scheduling			
framework document by posting to Reclamation's website.	_	Framework is available at https://www.usbr.gov/mp/hydro.html.	6/
Include an agenda item on the next MMPPC and the MP SNR O&M meeting to discuss FY:			0,
schedule and receive input from power customers.	_	This action will occur when the next MMPPC is scheduled.	
positional and reserve input from power customers.	3/3/2013	This decient will decid when the next with the is self-cualed.	

	Develop a scheduling guide that Reclamation Area Offices will utilize to help schedule outages.	4/1/2020	Reclamation continues to develop this guide and provide updates at MMPPC meetings.	
(III).2.a R	eview and revise Hydropower Program Policy (FAC P04).			
	Revise existing Hydropower Program Policy to develop appropriate language that Power Resources Office will maintain, monitor, and renew procurement options to streamline regional hydropower program services in a way that is consistent with existing law and regulations.	7/3/2019	Complete.	
	Brief DC leadership on Policy overview briefing.	9/20/2019		
	Publish revised Hydropower Program Policy.		As of Oct 17, 2019, ready to publish.	
(III).2.b T	rack and evaluate the performance of implemented procurement streamlining solutions.			
	Develop specific benchmarks to measure cost savings by using new procurement tools.	11/1/2019	Reclamation will share the benchmarks on the MP Power Website and in customer meetings.	
IV. Imple	mentation - Value of Resource			
	ontinued support for WAPA - Energy imbalance market (EIM)			
(IV).1.a C				
(IV).1.a C	Continue to meet with customers to evaluate benefit and costs for implementation.		Reclamation provided the data for the gap analysis to BANC. Reclamation continues work on planning SCADA modifications for entering into the EIM. Reclamation received approval from customers' Governance Board for funding the EIM in future year. October 2019 status: Reclamation (CVO) planning to develop new dispatch algorithm by Sep 2020.	4/201
(IV).1.a C		4/2019 - Ongoing	planning SCADA modifications for entering into the EIM. Reclamation received approval from customers' Governance Board for funding the EIM in future year. October 2019 status: Reclamation (CVO) planning to develop new dispatch algorithm by Sep 2020.  Frequent meetings continue to occur between Reclamation, WAPA, and BANC.	
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	Continue to meet with customers to evaluate benefit and costs for implementation.  Continue coordination meetings with Reclamation, WAPA and BANC.  Continue to provide support for following WAPA determination on implementing EIM.  Explore water order schedules to allow for better forecasting of O'Neil Pump/Generaton Plant operations  Meet with SLDMWA, San Joaquin River Water Authority, and San Joaquin River Exchange Contractors to discuss option on improving O'Neil Operations.	4/2019 - Ongoing 4/2019 - Ongoing Ongoing and power demands. 6/12/2019	planning SCADA modifications for entering into the EIM. Reclamation received approval from customers' Governance Board for funding the EIM in future year. October 2019 status: Reclamation (CVO) planning to develop new dispatch algorithm by Sep 2020.  Frequent meetings continue to occur between Reclamation, WAPA, and BANC.  Public comment period on EIM ended on 8/16/19. On Aug 27, 2019, WAPA made a determination to move forward with their Sierra Nevada Region's participation in EIM.  Water customers (SLDMWA, San Joaquin River Water Authority, and San Joaquin River Exchange Contractors) have agreed to improve forecasting of operations at O'Neill Complete.	
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			Experiments 1, which proposed lower minimum takes in daylight low value hours, and 2, which	
			proposed lower minimum takes in surrounding hours by raising minimum takes in the monring on- peak hours, were accepted by Reclamation and WAPA to become a part of standard operations in	
			August 2019. Experiment 3, under which customers pre-disclose portions of their intended BR	
			schedule, appears to be a useful tool, but needs some automation to reduce the impact on	
			schedulers for customer data collection. A new experiment was proposed by a WAPA contractor at	
			last customer meeting which would provide a volume target to customers with the goal of	
	Evaluate proposals submitted by power customers to determine whether they should become part		providing even more customer flexibility. Reclamation is considering this experiment and	
	of standard operations.	8/2019 - Ongoing		8/2019 - Ongoing
	Discuss as a part of Reclamation's "Power Update" at all Power Customer CCC meetings.	10/10/19 - Ongoing	Experiments are evaluated monthly and discussed regularly at Power Customer CCC meetings.	10/10/19 - Ongoing
(IV).2 Tra	ck schedule for California zero carbon and carbon neutral rulemaking process.			
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			Reclamation is registered with California State list-serves responsible for SB-100 implementation	
	Reclamation's Power Resources Office will track the schedule for the California zero carbon and		and will receive updates as the rulemaking process continues. Reclamation's Power Resources	
	carbon neutral energy rulemaking process.	9/1/2021	Office will continue to work with the HPOC to keep awareness of this action.	Ongoing
V. Implei	mentation - Improved Customer Service			
(V).1.a Ad	dopt framework for large-scale delta conveyance facility.			
			Power customers were invited to the initial May 31, 2019 meeting to discuss recent changes to	
			the large-scale delta conveyance project and will continue to be involved in discussions as the	
	Engage power in the planning process and provide regular updates to power customers.	5/31/19 - Ongoing	project proceeds. For the latest update, please contact mppublicaffairs@usbr.gov.	5/31/19 - Ongoing
(V).1.b De	evelop Mid-Pacific webpage on Reclamation's website to host initiative updates.			
	Develop webpage that contains the (a) coordinated action plan (b) biannual undates (c)		The webpage and all associated information can be found here:	
	Develop webpage that contains the (a) coordinated action plan, (b) biannual updates, (c)	6/24/2010	The webpage and all associated information can be found here:	6/24/2010
	accomplishments, and (d) reference materials for the CVP Power Initiative.	6/24/2019	https://www.usbr.gov/mp/hydro.html - Complete.	6/24/2019