



MEMORANDUM

TO: SLDMWA Planning Committee Members

FROM: Pablo Arroyave, Chief Operating Officer

DATE: October 7, 2024

RE: Confirmation of Cost Allocation Methodology for Jones Pumping Plant Excitation and Control Modernization Project and O'Neill Pumping-Generating Plant (OPP) Upgrades Project and Recommendation to Approve Cost Allocation Methodology for O'Neill Transformer Replacement Project

BACKGROUND

The 2021 Bipartisan Infrastructure Law (BIL) authorized \$3.2 billion for extraordinary maintenance (XM) of U.S. Bureau of Reclamation (Reclamation) facilities. These funds are available to both reserved and transferred works facilities and will be administered through the Aging Infrastructure Account, a Reclamation-wide revolving fund created to sustain investment in Extraordinary Maintenance. Consistent with Finance & Administration Committee (FAC) recommendation and Board of Directors (BOD) approval received in November 2022, the Water Authority submitted a BIL application in December 2022 for the Jones Pumping Plant Excitation and Control Modernization Project and was awarded \$25 million for the project. Based on FAC recommendation and BOD approval received in November 2023, the Water Authority submitted a BIL application for the O'Neill Pumping-Generating Plant (OPP) Upgrades Project in December 2023 and was subsequently awarded \$11.6 million for this project.

The Water Authority executed a repayment contract for the JPP Excitation and Control Modernization Project with Reclamation in July 2024. This project will begin in 2025. No repayment contract negotiation process has started for the OPP Upgrades Project. The Water Authority is hopeful that more BIL funding will be made available for this project as a result of the additional BIL funding application the Water Authority submitted for this project in July 2024.

In addition to the above two ongoing projects, the four transformers at O'Neill Pumping-Generating Plant are beyond the end of their service life and are scheduled to be rehabilitated in 2025. However, the rehabilitation of the transformers is only expected to extend the service life of the transformers by approximately five years. The current cost estimate--which will be refined--for planning, design, manufacturing and installation of 4 replacement transformers is approximately \$35 million. The lead time to design and fabricate the four new single-phase transformers (including the spare) and protection system that provides the 4,160 Volt primary service to the 6 – 6,000 HP pump motors at the plant is approximately 5-years. The Water

Authority intends to apply for BIL funding in the next application cycle which is expected in March 2025.

ISSUE FOR DECISION

Whether the Planning Committee should confirm the cost allocation methodology for the Jones Pumping Plant Excitation and Control Modernization Project and the O'Neill Pumping-Generating Plant (OPP) Upgrades Project and recommend approval of the cost allocation methodology for the O'Neill Transformer Replacement Project.

RECOMMENDATION

Water Authority staff recommends the Planning Committee confirm the cost allocation methodology for the Jones Pumping Plant Excitation and Control Modernization Project and the O'Neill Pumping-Generating Plant (OPP) Upgrades Project and recommend approval of the cost allocation methodology for the O'Neill Transformer Replacement Project as proposed.

ANALYSIS

The Jones Pumping Plant and O'Neill Pumping-Generating Plant (OPP), along with the Delta-Mendota Canal, are the critical facilities required to deliver agricultural, municipal and industrial and refuge water supplies to all Water Authority members and therefore must be able to operate efficiently and effectively into the future. Because these facilities are 60-70 years old, these projects are extremely important to the continued operation of the CVP.

Implicit in the Board of Director's action to authorize execution of the repayment contract for the JPP Excitation and Control Modernization Project was an assumption that the "standard" cost allocation methodology (based on OM&R water rates and location of delivery) will apply. Similarly, Board action and direction related to the OPP Upgrades Project has also assumed the standard cost allocation methodology will apply. This methodology assumes all contractors that pay Upper Cost Pool and O'Neill Cost Pool charges (respectively) will share costs and benefits for the projects consistent with their proportional deliveries. Since the Planning Committee, whose charge is to make cost allocation methodology recommendations, did not exist when actions were initially taken relating to these large extraordinary OM&R projects, staff is seeking Planning Committee concurrence now.

Relative to the planned O'Neill Transformer Replacement Project, for which staff intends to seek BIL funding in 2025, staff is seeking a recommendation to the FAC to utilize the standard cost allocation methodology as it pursues a repayment contract (assuming award of BIL funds) and brings other actions to the BOD.

ATTACHMENT

1. FY 2026 SLDMWA EO&M Ten Year Plan

EO&M #	Project Title	BIL List	Facility	Priority	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	10 Yr Plan Total
EXTRAORDINARY O&M PROJECTS															
Estimated Project Cost (x \$1,000)															
E2026001	DCI U1 & U2 Restoration and Plant Electrical Upgrades	<input type="checkbox"/>	DCI	B-3 - a	1,027.2										1,027
C1997002	O&M Road Maintenance Program	<input type="checkbox"/>	DMC	B-4 - b	635.2		736.5		812.0		895.2				3,079
C1994005	Warehouse Building (Design & Construction)	<input type="checkbox"/>	ONP	B-4 - c	740.1										740
E2015001	TFO/LBFO/DCI Arc Flash Study	<input type="checkbox"/>	ALL	A-1 - b		225.0					248.0				473
E2015002	Electrical Equipment Periodic Reviews - OPP	<input type="checkbox"/>	ONP	A-1 - b		215.0					245.0				460
E2022005	Unit Protection Equipment & Control Board Replacement	<input type="checkbox"/>	ONP	B-2 - b		140.0	300.0	320.0	340.0						1,100
E2019024	Station Service Backup Battery System Replacement	<input checked="" type="checkbox"/>	JPP	B-2 - c		300.0									300
E2024005	Standby Generator Transfer Switch: Design & Construction	<input type="checkbox"/>	ONP	B-3 - b		112.3									112
M2015003	Rehabilitate Coating on Pump Casings & Bifurcation	<input checked="" type="checkbox"/>	JPP	B-3 - c		550.0	600.0								1,150
M2017001	Shaft Sleeve Manufacturing	<input checked="" type="checkbox"/>	ONP	B-4 - b		315.0	325.0								640
M2019022	HVAC System Rehabilitation/Replacement	<input checked="" type="checkbox"/>	JPP	B-4 - b		400.0									400
M2019016	Siphon Breaker Valve Control System Rehabilitation	<input checked="" type="checkbox"/>	JPP	B-4 - c		250.0									250
M2019014	Stoplog Rehabilitation	<input checked="" type="checkbox"/>	JPP	B-5 - b		500.0	NOTE: THE COST INFORMATION ON THIS PLAN ARE OUTDATED AND WILL BE UPDATED BY FEBRUARY 28, 2025								500
M2019001	Bridge Crane Rehabilitation	<input checked="" type="checkbox"/>	ONP	B-5 - c		200.0									200
M2019009	Flowmetering Improvements	<input type="checkbox"/>	DCI	B-5 - c		100.0									100
M2019026	Stoplog Rehabilitation (Lakeside)	<input checked="" type="checkbox"/>	ONP	B-5 - c		75.0									75
M2019049	Lakeside & Canalside Trashrack Replacement	<input checked="" type="checkbox"/>	ONP	B-5 - c		175.7									176
M2014002	Rebalance Unit 5 Impeller	<input type="checkbox"/>	JPP	B-3 - c			305.0								305
C2019004	O&M Complex Pavement Rehabilitation	<input checked="" type="checkbox"/>	TFO	B-4 - b			250.0								250
C2022001	Retaining Wall Rehabilitation	<input type="checkbox"/>	JPP	B-5 - b			225.0								225
E2019025	Plant Security System Upgrades	<input checked="" type="checkbox"/>	JPP	B-5 - c			225.0								225
E2019030	Plant Security System Improvements	<input checked="" type="checkbox"/>	ONP	C-5 - d			109.0								109
C2016001	DMC Road Rehabilitation	<input checked="" type="checkbox"/>	DMC	B-4 - b				391.0							391
M2019025	100 Ton Gantry Crane Rehabilitation	<input checked="" type="checkbox"/>	JPP	B-4 - c				450.0							450
M2019043	HVAC System Rehabilitation/Replacement	<input checked="" type="checkbox"/>	ONP	B-4 - c				100.0							100
E2019010	Plant Flowmeter System Rehabilitation	<input checked="" type="checkbox"/>	ONP	B-5 - c				244.0							244
M2019033	Plant Roof Surface Replacement	<input checked="" type="checkbox"/>	ONP	B-7 - c				100.0							100
C1996012	Intake Channel Embankment Stabilization	<input checked="" type="checkbox"/>	DMC	B-3 - b					750.0		2,500.0	2,500.0			5,750
C2019001	Radial Gate Rehabilitation Program	<input checked="" type="checkbox"/>	DMC	B-3 - c					500.0	800.0	800.0	800.0	800.0	800.0	4,500
C1996009	Gravel JPP Intake Channel Road	<input type="checkbox"/>	DMC	B-4 - c					550.0						550
M2019015	Trashrack Cleaner Rehabilitation	<input checked="" type="checkbox"/>	JPP	B-4 - c					300.0						300
M2019045	Stub Shaft Crane Rehabilitation	<input type="checkbox"/>	JPP	B-4 - c					175.0						175
M2022003	Trashrack Cleaner & Stoplog Crane Rehabilitation/Automation	<input checked="" type="checkbox"/>	ONP	B-4 - c						750.0					750
M2022004	Check Structure Mech Equipment Rehab/Replacement Program	<input checked="" type="checkbox"/>	DMC	B-4 - c					600.0						600
C2019005	Penstock/Manifold Interior Coating Rehabilitation	<input checked="" type="checkbox"/>	DCI	B-5 - b					150.0						150
E2019019	Plant Security System Improvements	<input checked="" type="checkbox"/>	DCI	B-5 - b					50.0						50
M2019048	Plant Hydraulic System Rehabilitation/Replacement	<input type="checkbox"/>	JPP	B-5 - c					325.0						325
E2015003	Arc Flash Study - JPP	<input type="checkbox"/>	JPP	A-1 - b						200.0					200
E2022003	Plant Protective Relay Replacement	<input checked="" type="checkbox"/>	JPP	B-2 - b						300.0					300
C2023003	Recoat Exterior of All Penstocks	<input type="checkbox"/>	ONP	B-4 - c						500.0					500
M2010001	Domestic/Potable Waterline Replacement	<input type="checkbox"/>	JPP	B-5 - c						500.0					500
E2019001	Pump & Motor Rehabilitation	<input checked="" type="checkbox"/>	DCI	B-3 - c							259.0	264.0	275.0		798

EO&M #	Project Title	<div>BIL List</div>	Facility	Priority	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	10 Yr Plan Total
E2019015	Plant Motor Control Center Upgrades	<input checked="" type="checkbox"/>	DCI	B-3 - c							200.0	153.0			353
C2019002	Canal Embankment Erosion Protection	<input checked="" type="checkbox"/>	DMC	B-4 - b							350.0				350
M2019008	Pump Intake Diffuser Panel Rehabilitation/Replacement	<input type="checkbox"/>	DCI	B-4 - c							75.0				75
M2019035	Industrial Water Storage Tank Rehabilitation	<input type="checkbox"/>	TFO	B-4 - c							125.0				125
M2019041	CA Turnout Slide Gate Rehabilitation/Replacement	<input checked="" type="checkbox"/>	DCI	B-4 - c							150.0				150
E2019022	Plant Annunciator Modernization	<input checked="" type="checkbox"/>	DCI	B-5 - b							150.0				150
E2019031	Plant Annunciator Upgrades	<input checked="" type="checkbox"/>	ONP	B-5 - c							450.0				450
M2008002	Cooling Water Line Replacement	<input checked="" type="checkbox"/>	JPP	B-4 - b								400.0			400
E1994007	Replace Station Service Battery & Charger	<input type="checkbox"/>	JPP	B-4 - c								141.0			141
E2019006	Current & Potential Transformer Rehabilitation	<input type="checkbox"/>	JPP	B-4 - c									250.0		250
E2009004	UPS Battery Replacement	<input checked="" type="checkbox"/>	JPP	B-4 - b										342.0	342
M2019027	Siphon Breaker System Rehabilitation	<input checked="" type="checkbox"/>	ONP	B-4 - c										200.0	200
M2019036	Domestic Water System Storage Tank Rehabilitation	<input type="checkbox"/>	TFO	B-4 - c										150.0	150
E2019011	UPS Battery Replacement	<input checked="" type="checkbox"/>	ONP	B-5 - c										250.0	250
C2009003	Wasteway Capacity Restoration	<input type="checkbox"/>	DMC	C-5 - c										75.0	75

FY TOTALS (x \$1,000):					\$2,402.5	\$3,558.0	\$3,075.5	\$1,605.0	\$4,552.0	\$3,050.0	\$6,447.2	\$4,258.0	\$1,325.0	\$1,817.0	
FUND 26 PROJECTS FY TOTALS (x \$1,000):					\$2,402.5	\$3,558.0	\$3,075.5	\$1,605.0	\$4,552.0	\$3,050.0	\$6,447.2	\$4,258.0	\$1,325.0	\$1,817.0	
FUND 26 10 Year Plan Grand Total (x\$1,000):															\$32,090.2

RESERVE PROJECTS					Estimated Project Cost (x \$1,000)										
S2024001	SCADA Replacement & Modernization Program (Reserve Fund)	<input checked="" type="checkbox"/>	ALL	B-4 - c	337.1	498.9	451.7	372.9	301.7	262.6	221.9	297.2	166.2		2,910
V1999001	Heavy Equipment Replacement Program (Reserve Fund)	<input type="checkbox"/>	ALL	B-5 - b	82.5	10.8	214.0	318.4	177.8	12.2	247.4	553.2	289.3	295.7	2,201
V1999002	Vehicle Replacement Program (Reserve Fund)	<input type="checkbox"/>	ALL	B-6 - c	491.3	337.1	128.2	157.0	442.2	216.0	223.8	116.3	180.5	183.9	2,476
C2011001	Facility Infrastructure Replacement/Rehabilitation Program	<input type="checkbox"/>	ALL	B-7 - c	262.6	67.6	139.7	99.9	72.1	157.3	71.6	44.9	181.2	184.6	1,282
E2000004	Replace Computer/Network Comm Equip (Reserve Fund)	<input type="checkbox"/>	ALL	C-6 - b	546.5	261.7	290.6	251.5	283.9	293.6	325.7	285.6	271.6	279.3	3,090
C2023005	EO&M Program Management Services	<input type="checkbox"/>	ALL	C-6 - c	550.0	550.0	550.0	550.0	550.0	550.0	550.0	550.0	550.0		4,950
FY TOTALS (x \$1,000):					\$2,270.0	\$1,726.1	\$1,774.2	\$1,749.7	\$1,827.7	\$1,491.7	\$1,640.4	\$1,847.2	\$1,638.8	\$943.5	
FUND 26 PROJECTS FY TOTALS (x \$1,000):					\$2,270.0	\$1,726.1	\$1,774.2	\$1,749.7	\$1,827.7	\$1,491.7	\$1,640.4	\$1,847.2	\$1,638.8	\$943.5	
FUND 26 10 Year Plan Grand Total (x\$1,000):															\$16,909.3

NOTE: THE COST INFORMATION ON THIS PLAN ARE
OUTDATED AND WILL BE UPDATED BY FEBRUARY 28, 2025

EO&M #	Project Title	<div>BIL List</div>	Facility	Priority	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	10 Yr Plan Total
SPECIAL FUNDED PROJECTS					Estimated Project Cost (x \$1,000)										
E2009005	Excitation System & Control Panel Refurbishment Project	<input checked="" type="checkbox"/>	JPP	B-2 - c	5,873.3	5,000.0	5,000.0	5,000.0							20,873
M2022001	Pump Bowl & Woodward Governor Replacement Program	<input type="checkbox"/>	ONP	B-3 - b	8,321.6	5,715.2		2,986.8	3,076.4	3,168.7					23,269
C2015003	DMC Subsidence Correction Project	<input checked="" type="checkbox"/>	DMC	B-3 - c	11,789.6	50,000.0	50,000.0	50,000.0	50,000.0	50,000.0	50,000.0	50,000.0	50,000.0	50,000.0	461,790
C2025001	Floating Solar Project - 5 Year Pilot Study	<input type="checkbox"/>	DMC	B-5 - d	4,857.7	6,715.9	907.1	670.1	1,553.3						14,704
E2019005	Station Service SWBD & Breaker Replacement	<input checked="" type="checkbox"/>	JPP	B-2 - b		1,500.0		3,100.0	3,250.0						7,850
E2004002	Unit Rotor & Stator Rewind (All Units)	<input checked="" type="checkbox"/>	ONP	B-3 - b	624.9		5,070.0	5,222.1	5,378.8	5,540.2	5,706.4	5,877.6			33,420
M2022002	Pump Assembly & Penstock Rehabilitation Program	<input checked="" type="checkbox"/>	ONP	B-3 - b		2,005.6	2,065.8	2,127.7	2,191.6	2,257.3	2,325.0				12,973
E2022004	Switchgear Paralleling	<input checked="" type="checkbox"/>	JPP	B-3 - c		2,500.0									2,500
E2023002	Main Transformer Replacement Project	<input checked="" type="checkbox"/>	ONP	B-3 - b		1,700.0		750.0	10,000.0	10,000.0	10,000.0		3,000.0		35,450
C2015006	Replace DMC Althea Ave Bridge	<input checked="" type="checkbox"/>	DMC	B-4 - c			1,500.0	1,545.0							3,045
C2015005	Replace DMC Russell Ave Bridge	<input checked="" type="checkbox"/>	DMC	B-4 - c					1,500.0	1,545.0					3,045
C1994008	Dredge JPP Intake Channel	<input type="checkbox"/>	JPP	B-4 - c							500.0		2,500.0		3,000
M2019030	Design & Install Forebay Trashrack Cleaner & Stoplog Hoist	<input checked="" type="checkbox"/>	ONP	B-5 - d								200.0			200

FY TOTALS (x \$1,000):

\$31,467.1

\$75,136.6

\$64,542.9

\$71,401.8

\$76,950.1

\$72,511.2

\$68,531.4

\$56,077.6

\$55,500.0

\$50,000.0

FUND 25 PROJECTS FY TOTALS (x \$1,000):	\$31,467.1	\$75,136.6	\$64,542.9	\$71,401.8	\$76,950.1	\$72,511.2	\$68,531.4	\$56,077.6	\$55,500.0	\$50,000.0
FUND 25 10 Year Plan Grand Total (x\$1,000):										\$622,118.6

	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
FISCAL YEAR GRAND TOTALS: (EO&M, Grant, Reserves & Capital Improvement Projects) (FUNDS 25, 26 & 70)	\$36,139.6	\$80,420.7	\$69,392.6	\$74,756.4	\$83,329.8	\$77,052.8	\$76,619.0	\$62,182.7	\$58,463.8	\$52,760.5
	10 Year Plan Grand Total (x\$1,000):									\$671,118.1

Excitation System & Control Panel Refurbishment Project (BIL Application)

OPP Unit Rehabilitation Projects (BIL Application)

Project Meets Planning Committee Criteria

NOTE: THE COST INFORMATION ON THIS PLAN ARE
OUTDATED AND WILL BE UPDATED BY FEBRUARY 28, 2025