



MEMORANDUM

TO: SLDMWA Board of Directors, Alternates
SLDMWA Water Resources Committee
SLDMWA Finance and Administration Committee

FROM: Pablo Arroyave, Chief Operating Officer
Jaime McNeil, Engineering Manager

DATE: August 4, 2022

RE: **Board of Directors to Consider Adopting Resolution Authorizing Award of Contract, Execution of Construction Agreement for O'Neill Pumping-Generating Plant Power Transformer Rehabilitations, and Expenditure of up to \$3.56M from the FY22 and FY23 EO&M Budgets; CEQA Exemption**

BACKGROUND

The O'Neill Pump/Generator Plant (Plant) is a vital part of the Central Valley Project as it allows for the storage and delivery of both project and non-project water. The main transformers have been in service since 1968. A 2019 condition assessment and value engineering study determined that the transformers are at the end of their useful life and are recommended for rehabilitation. Unacceptable quantities of acid and sludge were found via oil analysis since April FY20, thus a Hot Oil Reconditioning was completed in FY21 to ensure the transformers remained eligible for rehabilitation. The Hot Oil Reconditioning was successful in prolonging the life of the transformers and provided time to properly design, solicit for, and complete the rehabilitation. It is unknown how much time is extended with the Hot Oil Reconditioning, and any further delays to the rehabilitation project could result in requiring a full replacement of the transformers at a significant cost and an extended plant outage. Considerable research of past water years was conducted to identify the best time of year to plan this project in order to minimize delivery impacts to our member districts. One continuous 32-day outage was evaluated against four separate 10-day outages. One continuous outage was chosen as the best option as additional risks are introduced with each single outage and would greatly complicate the rehabilitation. The Authority is acutely aware of the delivery impacts that could be encountered during a month long outage, and understands that the current hydrology will ultimately drive the schedule of the project. Language has been incorporated into the agreement to give the Authority the option to postpone or cancel the contract if necessary.

Reclamation's Technical Services Center (TSC) was contracted for the Technical Design Specifications for the rehabilitation, and will also be utilized for the construction technical support of the construction contract. During construction, TSC will provide engineering support, supervise and conduct field tests, and finalize drawings through a Letter of Agreement between Reclamation and the Water Authority.

The Plant is fed via a PG&E 70 kV line, through a WAPA circuit breaker to three (3) Single-Phase Transformers. There are four (4) transformers, where one (1) is a spare, each one is 10 MVA, 72.5/4.16 kV. They are the original transformers from 1968, and the spare transformer has never been placed into service. All four transformers will be included in the construction contract for rehabilitation.

With the assistance of TSC, the Water Authority formally solicited for the Main Transformer Rehabilitation on March 28, 2022. While the majority of the work will not occur until March & April of 2023, long submittal and lead times make it necessary to award the contract now. The main components of work consist of rehabilitating three (3) in-service power transformers and one (1) spare transformer, and refilling with synthetic ester fluid. The rehabilitation consists of new gaskets, low side and neutral bushings, valves, liquid level gauges, thermowells and temperature gauges, paint, oil preservation system (conservator), fans and temperature controls, protective relay upgrade, and hazardous waste disposal.

ISSUE FOR DECISION

Whether to adopt the proposed Resolution Authorizing Award of Contract, Execution of Construction Agreement for O'Neill Pumping/Generating Plant Power Transformer Rehabilitations, and Expenditure of up to \$3.56M from the FY22 and FY23 EO&M Budgets and CEQA Exemption

RECOMMENDATION

Staff recommends adoption of the proposed resolution.

RFP PROCESS & DETAILS

On March 28, 2022 the Water Authority formally solicited for sealed proposals to provide all labor, equipment and services for the rehabilitation of four (4) single phase power transformers at the O'Neill Pumping/Generating Plant with the following critical dates:

April 12, 2022	Mandatory Pre-Proposal Conference/ Site Visit
May 13, 2022	Last day to submit questions
May 27, 2022	Deadline for responses to questions
June 13, 2022	Proposals Due
June 27 – June 30	Proposal Evaluation
June 29, 2022	Additional Questions/Clarifications requested from NASS
July 27, 2022	Revised Proposal Due
August 1 – August 3	Revised Proposal Evaluation

The solicitation was publicly posted on the Water Authority website, in the Merced-Sun Star newspaper, and also sent directly to four (4) contractors known to perform this type of work. Two proposers attended the Mandatory Pre-Proposal Conference and Site Visit. Questions were submitted and both TSC and the Water Authority provided responses. North American Substation Services (NASS) submitted the only proposal. It was determined that the proposal was missing key technical details.

Since NASS was the only bidder, the Water Authority opted to provide an extension for a revised proposal. TSC provided NASS with a detailed memo listing the missing requirements. The revised proposal was received on July 27, 2022, and it was determined that it included sufficient technical details and that NASS is qualified to complete the required scope of work. NASS proposed to complete the scope of work for \$3,933,000.

NASS's initial proposal provided a schedule to complete the onsite work during the months of February, March, and April 2023. The spare transformer will be rehabilitated in February and March, and will not require a plant outage. From April 3 – April 26, NASS would complete the rehabilitation of the three in-service transformers during a full plant outage. NASS will utilize two 12-hour shifts for a 24-hour operation, with no work occurring on Sundays. During this outage, the Water Authority will continue to meet demands by following the attached Operations Plan in close coordination with the Central Valley Operations Office of the U.S. Bureau of Reclamation.

The proposed resolution would authorize award of contract to NASS and authorize execution of a construction services agreement with NASS on substantially the terms discussed with the Board (see draft Construction Agreement, included as an attachment to the proposed resolution), as well as such actions as may be required or authorized to effectuate that agreement.

Authorizing execution of this Construction Agreement is for the rehabilitation of an existing facility involving negligible expansion of the existing use and will not result in a direct change in the environment or a reasonably foreseeable indirect change to the environment and shall, therefore, be exempt from the provision of the California Environmental Quality Act per CEQA Guidelines Sections 15301(a)(b) and(d).

BUDGET IMPLICATIONS

This proposed expenditure of up to \$3.56M will be funded utilizing budgeted funds from FY22 and FY23 EO&M budget. Additional FY24 EO&M funds (~\$1.1M) will be required to complete the scope of work included in the Contract; such amount will be included in the FY24 budget. See Attached OPP Main Transformer Rehabilitation; Budget Breakdown for details.

ATTACHMENTS

1. Proposed Resolution
2. Draft Construction Agreement
3. Operations Plan
4. OPP Main Transformer Rehabilitation – Budget Breakdown

SAN LUIS & DELTA-MENDOTA WATER AUTHORITY

RESOLUTION NO. 2022-__

RESOLUTION AUTHORIZING CONTRACT, EXECUTION OF CONSTRUCTION AGREEMENT FOR O'NEILL PUMPING/GENERATING PLANT POWER TRANSFORMER REHABILITATIONS AND EXPENDITURE OF UP TO \$3.56M FROM THE FY22 AND FY23 EO&M BUDGET, AND CEQA EXEMPTION

WHEREAS, the San Luis & Delta-Mendota Water Authority (Water Authority) is responsible for operating and maintaining O'Neill Pumping/Generating Plant; and

WHEREAS, the main transformers have been in service for 54 years and a 2019 Condition Assessment and 2019 Value Engineering Study performed by U.S. Bureau of Reclamation determined they are at the end of their useful life and are recommended for rehabilitation; and

WHEREAS, a Hot Oil Reconditioning was completed in 2021 to ensure the transformers remained eligible for Rehabilitation; and

WHEREAS, a delay in rehabilitating the transformers could render them ineligible for rehabilitation thereby requiring a full replacement, putting the reliability of the O'Neill Pumping/Generating Plant in jeopardy; and

WHEREAS, the Water Authority formerly solicited proposals for the O'Neill Pumping/Generating Plant Power Transformer Rehabilitations and received one Proposal from North American Substation Services, LLC (NASS) for the cost of \$3,933,000; and

WHEREAS, NASS has demonstrated the ability to complete the scope of work listed in the Contract Documents; and

WHEREAS, the onsite work will not be conducted until March and April of 2023, long lead items and required submittals necessitate the early issuance of this Construction Agreement; and

WHEREAS, Section 1.1. of the Water Authority's Consolidated Procurement Policy, adopted by Resolution on April 10, 2020, requires the Board to specifically authorize contracts greater than \$200,000; and

WHEREAS, the initial stages of the O'Neill Pumping/Generating Plant Power Transformer Rehabilitations will be funded utilizing the \$3.563M that remains available in the Fiscal Year 2022 and Fiscal Year 2023 Extraordinary Operation and Maintenance Budget; and

WHEREAS, the approximately \$1.1M in additional funds required to complete the O’Neill Pumping/Generating Plant Power Transformer Rehabilitations Project will be sought in the Fiscal Year 2024 Proposed Extraordinary Operation and Maintenance Budget, and the Authority has retained the discretion to terminate the contract if such funding is not appropriated; and

WHEREAS, authorizing execution of this Construction Agreement is for the rehabilitation of an ongoing project and existing facility involving negligible expansion of the existing use and will not result in a direct change in the environment or a reasonably foreseeable indirect change to the environment and shall, therefore, be exempt from the provisions of the California Environmental Quality Act per CEQA Guidelines Sections 15261(a) and 15301, including but not limited to subdivisions (a), (b), and (d); and

WHEREAS, Water Authority staff recommends that the Board of Directors authorize negotiation and execution of a Construction Agreement with NASS.

NOW, THEREFORE, BE IT RESOLVED, AS FOLLOWS, THAT:

Section 1. The facts stated in the recitals above are true and correct, and the Board so finds and determines.

Section 2. Based on the above Recitals and the facts as stated in Attachment 1, the Board hereby finds as follows:

- (a) NASS is qualified to complete the O’Neill Pumping/Generating Plant Power Transformer Rehabilitations; and
- (b) the O’Neill Pumping/Generating Plant Power Transformer Rehabilitations was competitively solicited through the formal solicitation procedures per the Water Authority’s Consolidated Procurement Policy.

Section 3. Based on the facts as stated in Attachment 1, the price proposed for the construction work is fair and reasonable for the repairs and replacement, and will be funded utilizing available funds in the Fiscal Year 2022 and Fiscal Year 2023 Extraordinary Operation and Maintenance Budget and, if appropriated, additional funds from the Fiscal Year 2024 Extraordinary Operation and Maintenance Budget.

Section 4. The Executive Director or the Chief Operating Officer, for and on behalf of the Water Authority, is hereby authorized and directed to negotiate and execute a Construction Agreement with NASS for services on substantially the terms discussed with the Board, as well as to take such actions as may be required or authorized by this Board to effectuate that agreement.

PASSED, APPROVED AND ADOPTED this 4th day of August, 2022, by the Board of Directors of the San Luis & Delta-Mendota Water Authority.

Cannon Michael, Chairman
SAN LUIS & DELTA-MENDOTA WATER AUTHORITY

Attest:

Federico Barajas, Secretary

I hereby certify that the foregoing Resolution No. 2022-__ was duly and regularly adopted by the Board of Directors of the San Luis & Delta-Mendota Water Authority at the meeting thereof held on the 4th day of August, 2022.

Federico Barajas, Secretary

CONSTRUCTION AGREEMENT

THIS AGREEMENT, dated for identification as of _____, 2022, is between the **SAN LUIS & DELTA-MENDOTA WATER AUTHORITY**, a California Joint Powers Agency, (hereinafter called "Authority"), and North American Substation Services, LLC, a Delaware Limited Liability Company (hereinafter called "Contractor").

The parties hereto mutually agree to the terms and condition set forth herein.

I. CONTRACT DOCUMENTS

- A. The Contract Documents referred to herein are incorporated herein by reference as if set forth in full in this Agreement.
- B. Work called for in any one Contract Document and not mentioned in another is to be performed and executed as if mentioned in all Contract Documents. The table of contents, titles and headings contained herein and in said documents are solely to facilitate reference to various provisions of the Contract Documents and in no way affect or limit the interpretations of the provisions to which they refer.
- C. The Contract Documents shall include the Notice to Contractors, Addenda, Proposal Form, Construction Agreement, the Proposal Guarantee, the Performance Bond, the Payment Bond, Guarantee Form, the General Conditions, the Special Provisions, Specifications, Exhibits, Permits from other agencies that may be required by law, the Contract Drawings and Plans, the Contract Schedule, and any and all supplemental agreements amending or extending the Work contemplated and which may be required to complete the Work in an acceptable manner. Supplemental agreements are written agreements covering alterations, amendments or extensions to the Contract Documents and include Change Orders, Construction Change Directives, Field Directives, Field Orders, Bulletins and supplemental drawings.

II. DEFINITIONS

Unless otherwise specifically provided herein, all works and phrases defined in the General Conditions shall have the same meaning and intent in this Agreement.

For purposes of this Agreement, "Outage" shall mean the period during which the pumping plant is permitted to be shutdown to permit the work under this Agreement. If the permitted period of the Outage is less than the time in which the Contractor proposed to perform work required during the Outage (such period not to exceed 45 days), then SLDMWA will pay reasonable acceleration costs if necessary to make up the shortfall in time.

III. AGREEMENT CONTROLS

In the event of a conflict between the terms and conditions as set forth in this Agreement and the terms and conditions set forth in other Contract Documents, the terms and conditions set forth in this Agreement shall prevail.

IV. SCOPE OF CONTRACT

Contractor agrees to furnish all tools, equipment, apparatus, facilities, labor and material and transportation necessary to perform and complete in a good and workman like manner to the

satisfaction of SLDMWA, all the work required for the Contract for the Project entitled: O'Neill Pumping-Generating Plant Power Transformer Rehabilitations

V. CONTRACT AMOUNT AND PAYMENTS

SLDMWA agrees to pay and Contractor agrees to accept, in full payment for the above work,

DOLLARS (\$ _____)

as the stipulated sum price which Contractor Proposal in its Proposal Form, subject to additions and deductions by Change Order(s) as provided in the General Conditions.

VI. PROGRESS AND FINAL PAYMENTS

Progress and final payments shall be in accordance with the General Conditions.

VII. RETENTION OF SUMS CHARGED AGAINST CONTRACTOR

When, under the provisions of this contract, SLDMWA shall charge any sum of money against Contractor, SLDMWA shall deduct and retain the amount of such charge from the amount of the next succeeding progress estimate, or from any other moneys due or that may become due to the Contractor from SLDMWA. If, on completion or termination of the Contract, sums due contractor are insufficient to pay SLDMWA's charges against him, SLDMWA shall have the right to recover the balance from Contractor or his sureties.

VIII. TIME OF COMPLETION

- A. The entire Work shall be brought to completion in the manner and within the time period provided for in the Contract Documents, commencing on the date of issuance of the Notice to Proceed.
- B. Failure to complete the Work by the completion date and in the manner provided for by the Contract Documents, or to complete milestone work by the required deadline, shall subject Contractor to liquidated damages as hereinafter provided in this Agreement. Time is of the essence in these Contract Documents.

IX. INSURANCE

Contractor shall maintain in full force and effect at all times during the term of the Agreement, at its sole expense, policies of insurance in accordance with the General Conditions.

X. NO WAIVER OF REMEDIES

- A. Neither the inspection by SLDMWA or its agents, nor any order or certificate for the payment of money, nor any payment for, nor acceptance of the whole or any part of the Work by SLDMWA, nor any extensions of time, nor any position taken by SLDMWA or its agents shall operate as a waiver of any provision of this Agreement or of any power herein reserved to SLDMWA or any right to damages herein provided, nor shall any waiver of any breach of the Agreement be held to be a waiver of any other or subsequent breach.
- B. All remedies provided in this Agreement shall be taken and construed as cumulative; that is, in addition to each and every other remedy herein provided, and SLDMWA shall have any and all equitable and legal remedies which it would in any case have.

XI. DETERMINATION OF DAMAGES

- A. The actual fact of the occurrences of damages and the actual amount of the damages which SLDMWA would suffer if the work were not completed within the specified times set forth are dependent upon many circumstances and conditions which could prevail in various combinations, and, from the nature of the case, it is impracticable and extremely difficult to fix the actual damages.
- B. Damages which SLDMWA would suffer in the event of delay include loss of the use of the Project, and, in addition, expenses of prolonged employment of an architectural and engineering staff; costs of administration, inspection, and supervision; and the loss suffered by the public within the San Luis & Delta-Mendota Water Authority by reasons of the delay in the completion of the Project to serve the public at the earliest possible time.
- C. Accordingly, the parties hereto agree, and by execution of this Agreement, Contractor acknowledges that it understands, has ascertained and agrees, that the amounts set forth herein as liquidated damages shall be presumed to be that amount of damages sustained by the failure of Contractor to complete the entire work, or such portion of the work as SLDMWA identifies in the Contract Documents, within the times specified.

XII. LIQUIDATED DAMAGES

See also GENERAL CONDITIONS SECTION 8.10. LIQUIDATED DAMAGES FOR DELAY and Milestones in SPECIFICATIONS SECTION 01 11 00 SUMMARY OF WORK.

The amount of the liquidated damages to be paid by Contractor to the Authority shall be as follows, per **Calendar day** until the work in question is completed:

Failure to complete each Milestone:	Seven thousand five hundred dollars (\$7,500.00)
Failure to complete all work by the end of construction schedule:	Seven thousand five hundred dollars (\$7,500.00)

XIII. TERMINATION AFTER ALLOTTED WORKING OR CALENDAR DAYS

- A. In addition to any rights it may have, SLDMWA may terminate this Contract, the Contractor's control or the Contractor's right to proceed at any time after the allotted number of Working or Calendar Days as adjusted by any extensions of time for excusable delays that may have been granted.
- B. Upon such termination Contractor shall not be entitled to receive any compensation for services rendered by it before or after such termination, and it shall be liable to SLDMWA for liquidated damages for all periods of time beyond such termination date until the work is completed.

XIV. CONTRACTOR BANKRUPT

- A. If Contractor should commence any proceeding under the Bankruptcy Act, or if contractor

be adjudged a bankrupt, or if Contractor should make any assignment for the benefit of creditors, or if a receiver should be appointed on account of Contractor's insolvency, then the SLDMWA Board may, without prejudice to any other right or remedy, terminate the Contract and complete the work by giving notice to Contractor and his surety according to the provisions of Article 5 of the General Conditions.

- B. SLDMWA shall have the right to complete, or cause completion of the work, all as specified in Article 5 of the General Conditions.

XV. PERFORMANCE AND PAYMENT BONDS

- A. The Contractor shall, before beginning said work, file two bonds with the SLDMWA, each made payable to the SLDMWA. These bonds shall be issued by a Surety Company authorized to do business in the State of California, and shall be maintained during the entire life of the Contract at the expense of the Contractor.

1. One bond shall be the Performance Bond in the amount of one hundred percent (100%) of the Contract and shall guarantee the faithful performance of the Contract.
2. The second bond shall be the Payment Bond required by Part 4, Title 15, Chapter 7, Division Three of the Civil Code of the State of California and shall be in the amount of one hundred percent (100%) of the Contract.

- B. Any alteration or alterations made in any provision of this Contract shall not operate to release any surety from liability on any bond required hereunder and the consent to make such alterations is hereby given, and any surety on said bonds hereby waives the provisions of Section 2819 of the Civil Code.

- C. Bonds shall only be accepted from an “*Admitted surety insurer*”, which means an insurer to which the Insurance Commissioner has issued a certificate of authority to transact surety insurance in this state. ***Contractor must submit all of the following with the bonds:***

1. The original, or a certified copy, of the unrevoked appointment, power of attorney, bylaws or other instrument entitling or authorizing the person who executed the bond to do so.

XVI. SUBSTITUTION OF SECURITIES FOR MONEY WITHHELD

- A. As provided in Public Contract Code section 22300, at any time prior to the submission of the Contractor's first payment application, Contractor may request substitution of securities for any money withheld by the SLDMWA to ensure performance of the Contract.
- B. At the expense of the Contractor, securities equivalent to the money withheld may be deposited with the SLDMWA or with an approved financial institution as escrow agent according to a separate Security Agreement.
- C. Securities eligible for substitution shall include those listed in Section 16430 of the Government Code or bank or savings and loan certificates of deposit. A fee set by the SLDMWA Board shall be charged for such substitution.

XVII. LABOR CODE COMPLIANCE

SLDMWA affirmatively identifies this project as a “public work” as that term is defined by Labor Code section 1720, and the project is, therefore, subject to prevailing wages under Labor Code section 1771. Contractor and its subcontractors shall fully comply with all the provisions of the California Labor Code governing the performance of public works contracts including, but not limited to, payment of prevailing wages, limitations on time worked, compliance with apprentice requirements, maintenance of payroll records, posting of wages at job site and prohibitions against discrimination.

XVIII. UNFAIR COMPETITION

A. The following provision is included in this agreement pursuant to California Public Contract Code §7103.5.

"In entering into a public works contract or a subcontract to supply goods, services, or materials pursuant to a public works contract, the contractor or subcontractor offers and agrees to assigning to the awarding body all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Sec. 15) or under the Cartwright Act (Chapter 2 (commencing with Section 16700) of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, services, or materials pursuant to the public works contract or the subcontract. This assignment shall be made and become effective at the time the awarding body tenders final payment to the contractor, without further acknowledgment by the parties."

XIX. ASSIGNMENT

Neither this Agreement nor any rights herein of Contractor shall be assigned without the written consent of SLDMWA first obtained.

XX. NO THIRD PARTY BENEFICIARIES

This Agreement is entered into solely between the SLDMWA and Contractor. There are no third party beneficiaries, intended, unintended, or otherwise to this Agreement.

////SIGNATURE PAGE FOLLOWS////

IN WITNESS WHEREOF, the parties hereto have signed the Agreement on the date set forth opposite their names.

CONTRACTOR:

(California Corporations: must be signed by company’s CEO, President, or Vice President as well as the Secretary or CFO.)

Date

Tax I.D. Number

Signature

Signature

Print Name

Print Name

Title

Title

SAN LUIS & DELTA-MENDOTA WATER AUTHORITY, A Joint Powers Agency:

Date

ATTEST:

Pablo R. Arroyave, Chief Operating Officer

O'Neill Pumping Plant Transformer Rehabilitation Project

Delta-Mendota Canal Operations Plan

The proposed O'Neill Pumping Plant (OPP) outage for transformer rehabilitation is scheduled to take place during the entire month of April 2023. This event will result in the OPP being off-line and unavailable for the 30-day outage. In order to meet the demands of our member agencies, the following scenarios represent various operational procedures that may be implemented during this event. These scenarios are based on the five classifications of water year type, and also take into account historical operational activities. As we approach April, a more exact estimate of total demands can be established. The detailed estimate will allow us to call for enough pumping at Jones Pumping Plant (JPP) to meet demands with a small amount of surplus for operational flexibility. Demands will be evaluated weekly, and pumping rates at JPP will be adjusted accordingly. In some of the scenarios, an agreement may be required with the Department of Water Resources (DWR) to convey water designated for federal pumping.

Note: All scenarios are based on Delta-Mendota Canal (DMC) demands for April.

Scenario #1 Water Year Type – Wet

With an abundance of water from a wet year, the historical demand on OPP would be to pump large amounts of surplus water into the O'Neill Forebay for storage. During this type of water year, we typically have low Mendota Pool and canal side demands. This type of water year would likely allow us to operate with 2 units at JPP to meet all demands. Any surplus in the system from the 2-unit operation can be diverted through DCI and pumped into the California Aqueduct. If 2023 is a wet year, there will likely be surplus water available for federal pumping, which could be picked up by DWR unless there are very high flows at Vernalis which would allow DWR to export more SWP water through Banks.

Scenario #2 Water Year Type – Above Normal

During an above normal water year, the OPP would typically be used to pump a modest amount of surplus water into the O'Neill Forebay for storage. During this type of water year, we typically have a lower than average Mendota Pool and canal side demands. This type of water year would typically allow us to operate with 1 to 2 units at JPP in combination with DCI pumping to meet all demands. There may be surplus water available for federal pumping, which could be picked up by DWR unless there are very high flows at Vernalis which would allow DWR to export more SWP water through Banks.

Scenario #3 Water Year Type – Below Normal

Historically, below normal water years have resulted in a minimal amount of activity at JPP and OPP during the month of April. With small amounts of water being pumped and/or generated at OPP, it is not likely there will be any surplus water to be picked up by DWR. This type of water year would typically allow us to operate with 1 unit at JPP. However, with only 1 unit pumping at JPP there would likely be days requiring reverse flow at DCI to meet all demands (or river pump-ins). With 2 units at JPP, we would likely meet all demands, and have some surplus water to be diverted through DCI and pumped into the California Aqueduct (CA).

Scenario #4 Water Year Type – Dry

This type of water year has typically resulted in a range of pumping at the JPP from 1 to 3 units in operation. Demands on the system have typically been under 2,000 cfs and could be met with 2 units at JPP, or 1 unit at JPP and additional reverse flow from DCI (or river pump-ins) to meet all demands.

Scenario #5 Water Year Type – Critical

Critical water years have usually resulted in a minimal amount of pumping at JPP (historically 1 unit). During the majority of these types of water years, Mendota Pool and canal side demands have also been minimal. With OPP off-line during this period, and continuous 1 unit pumping at JPP we would likely have

a few days during the month that would require additional inflow to meet total system demands. Those additional inflows could come in the form of river water diversions from our upper DMC member districts (BCID, WSID, and Patterson ID) or Mendota Pool deliveries from Friant releases via the San Joaquin River. Water year 2022 was classified as “Shasta Critical” with very little available water from the Delta to meet senior water rights commitments South of the Delta. As a result, releases from Friant Dam were reaching the Mendota Pool by the first of April.

Summary Table

Scenario	Est Flow (JPP)	Est Flow DCI	Est Flow DWR	Delivery Options
1: Wet	1,000 to 2,500 cfs 1-3 Units	0 to 735 cfs Pumping	965 to 2,465 cfs Pumping	<ul style="list-style-type: none"> • Make all DMC and Mendota Pool deliveries via JPP pumping. • Utilize DCI to move additional water to the CA for conveyance to the O’Neill Forebay • Call on DWR to move excess water through Banks if conditions allow
2: Above Normal	1,000 to 2,500 cfs 1-3 Units	0-735 cfs Pumping	0 to 800 cfs Pumping	<ul style="list-style-type: none"> • Make all DMC and Mendota Pool deliveries via JPP. • Utilize DCI to move additional water to the CA for conveyance to the O’Neill Forebay. • Call on DWR to move excess water through Banks if conditions allow
3: Below Normal	800 to 1,000 cfs 1 Unit	0-735 cfs Pumping 0-900 cfs Reverse		<ul style="list-style-type: none"> • Meet upper and lower DMC and Mendota Pool deliveries with pumping at JPP. • Reverse flow from DCI to meet deliveries • Possible inflow from river pump-ins on the upper DMC (BCID, WSID, PID)
4: Dry	800 to 2,000 cfs 1-2 Units	0-735 cfs Pumping 0 cfs Reverse	0 cfs Pumping	<ul style="list-style-type: none"> • Make all DMC and Mendota Pool deliveries via JPP pumping. • Utilize DCI to move additional water to the CA for conveyance to the O’Neill Forebay • Possible inflow from river pump-ins on the upper DMC (BCID, WSID, PID)
5: Critical	800 to 1,000 cfs 1 Unit	0-735 cfs Pumping	0 cfs Pumping	<ul style="list-style-type: none"> • Use JPP to regulate canal levels and meet demands along the upper and lower DMC and provide additional water to the Mendota Pool that is not being met by SJR releases from Friant Dam. • Utilize DCI to move a small amount of additional water to the CA for conveyance to the O’Neill Forebay • Possible inflow from river pump-ins on the upper DMC (BCID, WSID, PID)

OPP Main Transformer Rehabilitation - Budget Breakdown

Funding To Date:	\$	4,754,100.00	Ref Table 1.0
Expenditures to Date:	\$	1,191,203.28	Ref Table 2.0
Remaining Funds:	\$	3,562,896.72	
Remaining Project Costs:	\$	4,697,700.00	Ref Table 3.0
*Funding Deficit	\$	(1,134,803.28)	

**\$1.1M will be requested in the FY2024 EO&M budgeting process. The additional requested funds will cover higher contract (NASS), contract management (TSC), and SLDMWA labor costs. A 10% Construction contract contingency has also been added.*

Table 1.0

Funding to Date	
FY21	\$ 108,300.00
FY22	\$ 2,545,800.00
FY23	\$ 2,100,000.00
Total:	\$ 4,754,100.00

Table 2.0

Expenditures to Date by FY (See Table 4.0 for Details)	
FY19	\$ 15,000.00
FY20	\$ 113,666.28
FY21	\$ 542,678.97
FY22	\$ 454,309.95
FY23 (3/1/2022 - 7/21/2022)	\$ 65,548.08
Total:	\$ 1,191,203.28

Table 3.0

Remaining Costs	
TSC LOA Change Order Construction Mgmt	\$ 25,000.00
NASS Proposal Cost	\$ 3,933,000.00
10% Construction Cost Contingency	\$ 393,300.00
SLDMWA Labor	\$ 346,400.00
Total:	\$ 4,697,700.00

Table 4.0

Expenditures to Date Details	
Transformer Condition Assessment LOA	\$ 15,000.00
High Side Bushing Replacement	\$ 105,000.00
Data Gathering LOA: 20-LC-20-0422	\$ 20,000.00
VE Study LOA: 20-LC-20-2713	\$ 50,000.00
Design LOA: 20-LC-20-2742	\$ 375,000.00
Hot Oil Reconditioning	\$ 87,917.00
Oil Tank Removal & Disposal	\$ 26,544.36
Construction Mgmt LOA: 21-LC-20-2939	\$ 440,000.00
Additional Oil Testing	\$ 3,000.00
SLDMWA Labor	\$ 68,741.92
Total:	\$ 1,191,203.28

Total Project Cost: \$ 5,888,903.28