



Transmission Agency of Northern California  
P.O. Box 15129 Sacramento, CA 95851-0129 (916) 852-1673

## MEMORANDUM

DATE: May 14, 2025

TO: TANC Commission

FROM: John Roukema  
Interim General Manager

SUBJECT: MAY 21, 2025 MEETING OF THE TRANSMISSION AGENCY OF NORTHERN CALIFORNIA

---

The Commission of the Transmission Agency of Northern California (TANC) will meet at 10:00 a.m. on Wednesday, May 21, 2025, at 2377 Gold Meadow Way, First Floor, Gold River, California, 95670. The meeting is also accessible by telephone at:

**Join Meeting: 1 (202) 945-4283; Phone Conference ID: 819 954 630#**

In addition to the customary reports, enclosed are reports related to WestConnect activities, California-Oregon Transmission Project (COTP) matters, Federal Energy Regulatory Commission and other related regulatory matters, Western Electricity Coordinating Council matters, Open Access Same-Time Information System matters, California Independent System Operator related matters and a report on TANC strategic planning efforts. The TANC Commission will also receive a report from TANC's Interim General Manager. The TANC Commission will then receive a report and consider potential action approving the Annual Monitoring Report for Palm Tract; a resolution approving the 2025 TANC Wildfire Mitigation Plan for the COTP; a resolution approving the First Amendment to the Management Services Agreement with Roukema Consulting LLC, a resolution adopting the Fiscal Year 2026 TANC Budget including revisions to the Open Access Transmission Tariff; a resolution regarding vesting power and authority in the TANC Contract Executive/General Manager, and a resolution approving an increase in COTP Entitlement for the Western Area Power Administration.

The TANC Commission will then consider administrative items and schedule its next meeting.

A Public Entity whose Members include:

Alameda, Biggs, Gridley, Healdsburg, Lodi, Lompoc, Modesto Irrigation District,  
Palo Alto, Plumas-Sierra Rural Electric Cooperative, Redding, Roseville,  
Sacramento Municipal Utility District, Santa Clara, Turlock Irrigation District, Ukiah

**TAB 1**

**CALL TO ORDER**

The TANC Chair will call the meeting to order.

**TAB 2**

**ROLL CALL**

The TANC Interim General Manager will conduct a roll call of the TANC Commission members in attendance.

**AGENDA**  
**TANC COMMISSION MEETING**  
**May 21, 2025**  
**10:00 AM**

**LOCATION**  
**2377 Gold Meadow Way**  
**First Floor Conference Room**  
**Gold River, CA 95670**

**Remote Locations:**

**Northern California**  
**Power Agency**  
651 Commerce Drive  
Roseville, CA 95678-6420

Any member of the public who desires to address the Commission during public comment portion of this meeting or on any item considered by the Commission at this meeting, before, or during the Commission's consideration of that item, shall so advise the Commission Chair or General Manager when public comment is called and when recognized shall thereupon be given an opportunity to do so.

Any person requiring accommodations in accordance with the Americans with Disabilities Act in order to attend or participate in this meeting are requested to contact Larry Riegle at [lriegle@tanc.us](mailto:lriegle@tanc.us) in advance of the meeting to arrange for such accommodations.

**Join Meeting: 1 (202) 945-4283; Phone Conference ID: 819 954 630#**

1. Call to Order

The TANC Chair will call the meeting to order.

2. Roll Call

A representative from TANC will conduct a roll call of TANC Commission members in attendance.

3. Approval of Agenda

The Commission will review the proposed agenda and approve it with any necessary corrections or deletions.

## PUBLIC COMMENT

4. The Commission will consider comments from the public at this time.

## CONSENT CALENDAR

ALL MATTERS LISTED UNDER THE CONSENT CALENDAR ARE CONSIDERED BY THE COMMISSION TO BE ROUTINE AND WILL ALL BE ENACTED BY ONE MOTION. THERE WILL BE NO SEPARATE DISCUSSION OF THESE ITEMS UNLESS A COMMISSIONER REQUESTS THAT AN ITEM BE SEPARATELY CONSIDERED PRIOR TO THE TIME THE COMMISSION VOTES ON THE MOTION TO ADOPT.

5. Approval of the Draft Minutes from the April 23, 2025 TANC Commission Meeting.  
Enclosed are the draft minutes from the April 23, 2025 TANC Commission meetings, for approval, subject to any necessary corrections or clarifications.
6. Report on TANC's Investment Purchases  
Enclosed are reports on TANC's investment purchases.
7. Report on General Manager's Committees  
Enclosed are approved meeting minutes from the following committees:
  - a. Engineering and Operations Committee
8. Report on WestConnect Activities  
Enclosed is a report regarding activities related to WestConnect.
9. Report on COTP Matters  
Enclosed is a report regarding California-Oregon Transmission Project matters.
10. Report on FERC and Related Regulatory Matters  
Enclosed is a report regarding Federal Energy Regulatory Commission and other related regulatory matters.
11. Report on WECC Matters  
Enclosed is a report regarding Western Electricity Coordinating Council matters.
12. Report on TANC OASIS Matters  
Enclosed is a report regarding usage on the Open Access Same-Time Information System and related matters.

13. Report on CAISO Matters

Enclosed is a report on California Independent System Operator related matters.

14. Report on TANC Strategic Planning Efforts

The Commission will receive a report on the status of workplans associated with ongoing strategic planning efforts.

**INFORMATION ITEMS**

15. Report from the TANC Interim General Manager

The Commission will receive a report from TANC's Interim General Manager.

**ACTION ITEMS**

16. Report and Potential Action on the Annual Monitoring Report for Palm Tract

The Commission will receive a report and may take action on the Annual Monitoring Report – Waterfowl Mitigation Plan Compliance for Palm Tract.

17. Resolution Approving the 2025 TANC Wildfire Mitigation Plan for the California-Oregon Transmission Project

The Commission will receive a report and consider a resolution approving the 2025 TANC Wildfire Mitigation Plan for the COTP.

18. Resolution Approving the First Amendment to the Management Services Agreement with Roukema Consulting LLC.

The Commission will consider a resolution approving the First Amendment to the Management Services Agreement with Roukema Consulting LLC, including for the services of its Designated Member John Roukema to continue serving as the Interim General Manager of TANC and to provide other management services.

19. Resolution Adopting the FY26 TANC Budget and Revised OATT

The Commission will receive a report and consider a resolution adopting the Fiscal Year 2026 TANC Budget including revisions to the Open Access Transmission Tariff.

20. Resolution Regarding Vesting Power and Authority in the TANC Contract Executive/General Manager

The Commission will receive a report and may take action on a resolution vesting power and authority, including signing authority, to the TANC Contract Executive/General Manager while maintaining that all power and authority, including signing authority, would also remain vested in the TANC Commission Chair.

21. Resolution Approving an Increase in the COTP Entitlement for WAPA

The Commission will receive a report and may take action on a resolution to increase COTP entitlement for the Western Area Power Administration by two megawatts associated with the recent California-Oregon Intertie rerate.

22. Report and Potential Action on Administrative Items

- a. Approval of an Update to Officers List for 2025

23. Meeting Calendar

The Commission will confirm the date of its next scheduled meeting is June 18, 2025.

**TAB 4**

**PUBLIC COMMENT**

The TANC Commission will consider comments from the public at this time.

**TAB 5**

**DRAFT MINUTES AND ATTACHMENTS**

MINUTES  
TRANSMISSION AGENCY OF NORTHERN CALIFORNIA  
COMMISSION MEETING  
APRIL 23, 2025

Chair Zettel (City of Redding) called the April 23, 2025 Transmission Agency of Northern California (TANC) Commission meeting to order at 10:00 a.m. Mr. Roukema (TANC Interim General Manager) took a roll call of the Commissioners in attendance. Meeting attendees are listed in Attachment 1.

*Approval of Agenda*

Chair Zettel asked if there were any recommended additions, deletions or modifications to the agenda. With no changes proposed, Mr. Olson (Sacramento Municipal Utility District) made a motion to approve the April 23, 2025 TANC Commission agenda. Mr. Caballero (Modesto Irrigation District) seconded the motion, which was approved by the TANC Commission. The approved agenda for the April 23, 2025 TANC Commission meeting is included as Attachment 2.

**PUBLIC COMMENT**

Chair Zettel asked if there were any members of the public that wished to address the TANC Commission. There were no requests.

**CONSENT CALENDAR**

Chair Zettel asked if any Commissioner would like a discussion or removal of any item under the Consent Calendar. There were no requests. Mr. Gill (Turlock Irrigation District) made a motion to approve the consent calendar. Mr. Forsythe (City of Roseville) seconded the motion, which was approved by the TANC Commission. The approved minutes from the March 19, 2025 TANC Commission meeting are included as Attachment 3.

## **INFORMATION ITEMS**

### ***Report from the TANC Interim General Manager***

Mr. Roukema reported that a license agreement with the Sacramento Municipal Utility District for the equipment that TANC has located at their Rancho Seco site is in its final review. Mr. Roukema also reminded the TANC Commissioners that the Fiscal Year 2026 TANC budget workshop was being held on April 24, 2025. Mr. Roukema reported that a South-of-Tesla Layoff agreement with Turlock Irrigation District and the City of Redding was nearing completion. Lastly, Mr. Roukema noted that TANC and the Western Area Power Administration (WAPA) have been coordinating on an additional two megawatts of COTP entitlement that WAPA should have received associated with the April 1, 2025 California-Oregon Intertie rerate, which would increase WAPA's COTP entitlement from 27 to 29 MWs. Mr. Roukema indicated that TANC is looking into the options of adjusting TANC Members allocations to account for the additional two MWs.

### ***Report on TANC Capital Replacement Plan and Procurement Matters***

Mr. Roukema provided the TANC Commission with an update on the status of the Series Capacitor procurement process being conducted by WAPA. Mr. Roukema also noted that the General Manager's Finance Committee will be scheduling a meeting to discuss actions related to the one-year Letter of Credit for the Series Capacitor replacement project that was put in place in August 2024. The TANC Commission and WAPA representatives then agreed to begin discussions to identify areas where TANC may be able to provide assistance and support to WAPA.

## **ACTION ITEMS**

### ***Report and Potential Action Regarding the Long-Term Layoff Agreement Annual Report***

Ms. Nguyen (Sacramento Municipal Utility District) presented the Long-Term Layoff Agreement Annual Report to the TANC Commission. After a discussion by the TANC Commission, Ms.

Hughes (City of Santa Clara) moved to approve the Long-Term Layoff Agreement Annual Report. Mr. Caballero (Modesto Irrigation District) seconded the motion which was then approved by the TANC Commission by roll call vote.

### **CLOSED SESSION**

Pursuant to California Code Section 54957.6, TANC General Counsel Mr. Gross placed the Commission into closed session.

After discussion, Mr. Gross reported that no reportable action was taken by the TANC Commission.

### **ACTION ITEMS**

#### ***Discussion and Possible Action to Approve a Management Services Agreement***

Mr. Gross (TANC Counsel) presented a Management Services Agreement for the TANC Contract Executive/General Manager position. The TANC Commission then discussed approving a Management Services Agreement with HVT Consulting, LLC through which its designated employee – Cory Danson would begin serving as the TANC Contract Executive/General Manager on July 1, 2025. After discussion by the TANC Commission, Mr. Forsythe (City of Roseville) moved to approve the Management Services Agreement with HVT Consulting LLC. The motion was seconded by Mr. Gill (Turlock Irrigation District) and approved by the TANC Commission. Resolution 2025-05 is included as Attachment 4.

#### ***Report and Potential Action on Administrative Items***

The TANC Commission considered an update to 2025 Officers List and an hourly rate increase for TANC staff (Guidehouse). After discussion by the TANC Commission, Mr. Gill (Turlock Irrigation District) moved to approve the administrative items. Mr. Caballero (Modesto Irrigation

District) seconded the motion which was then approved by the TANC Commission by roll call vote.

*Meeting Calendar*

The next regular TANC Commission meeting is scheduled for May 21, 2025. There being no further business, Chair Zettel adjourned the meeting.

ATTENDANCE LIST

TRANSMISSION AGENCY OF NORTHERN CALIFORNIA  
COMMISSION MEETING

April 23, 2025

10:00 AM

NAME

ORGANIZATION

Nick Zettel	City of Redding
Martin Caballero	Modesto Irrigation District
Manjot Gill	Turlock Irrigation District
Bill Forsythe	City of Roseville
Jon Olson	Sacramento Municipal Utility District
Hieu Nguyen	Sacramento Municipal Utility District
Chris Hoffman	Sacramento Municipal Utility District
Tony Zimmer	Northern California Power Agency
Kathleen Hughes	City of Santa Clara
Basil Wong	City of Santa Clara
Cory Danson	Western Area Power Administration
Michelle Williams	Western Area Power Administration
Melinda Jones	Western Area Power Administration
Steve Gross	TANC General Counsel
John Roukema	Interim General Manager
Heather Renschler	Ralph Anderson
Amy Cuellar	TANC Staff
Larry Riegle	TANC Staff

**AGENDA**  
**TANC COMMISSION MEETING**  
**April 23, 2025**  
**10:00 AM**

**LOCATION**  
**2377 Gold Meadow Way**  
**First Floor Conference Room**  
**Gold River, CA 95670**

**Remote Locations:**

<b>Redding Electric Utility</b> 3611 Avtech Parkway Redding, CA 96002	<b>Northern California Power Agency</b> 651 Commerce Drive Roseville, CA 95678-6420	<b>City of Santa Clara</b> 881 Martin Avenue Santa Clara, CA 95050
---	---	--

Any member of the public who desires to address the Commission during public comment portion of this meeting or on any item considered by the Commission at this meeting, before, or during the Commission’s consideration of that item, shall so advise the Commission Chair or General Manager when public comment is called and when recognized shall thereupon be given an opportunity to do so.

Any person requiring accommodations in accordance with the Americans with Disabilities Act in order to attend or participate in this meeting are requested to contact Larry Riegle at [lriegle@tanc.us](mailto:lriegle@tanc.us) in advance of the meeting to arrange for such accommodations.

**Join Meeting: 1 (202) 945-4283; Phone Conference ID: 578 193 986#**

1. Call to Order  
The TANC Chair will call the meeting to order.
2. Roll Call  
A representative from TANC will conduct a roll call of TANC Commission members in attendance.
3. Approval of Agenda  
The Commission will review the proposed agenda and approve it with any necessary corrections or deletions.

**PUBLIC COMMENT**

4. The Commission will consider comments from the public at this time.

CONSENT CALENDAR

ALL MATTERS LISTED UNDER THE CONSENT CALENDAR ARE CONSIDERED BY THE COMMISSION TO BE ROUTINE AND WILL ALL BE ENACTED BY ONE MOTION. THERE WILL BE NO SEPARATE DISCUSSION OF THESE ITEMS UNLESS A COMMISSIONER REQUESTS THAT AN ITEM BE SEPARATELY CONSIDERED PRIOR TO THE TIME THE COMMISSION VOTES ON THE MOTION TO ADOPT.

5. Approval of the Draft Minutes from the March 19, 2025 TANC Commission Meeting.

Enclosed are the draft minutes from the March 19, 2025 TANC Commission meetings, for approval, subject to any necessary corrections or clarifications.

6. Report on TANC's Investment Purchases

Enclosed are reports on TANC's investment purchases.

7. Report on General Manager's Committees

Enclosed are approved meeting minutes from the following committees:

- a. Audit Budget Committee
- b. Contracts Committee
- c. Open Access Transmission Tariff Committee

8. Report on WestConnect Activities

Enclosed is a report regarding activities related to WestConnect.

9. Report on COTP Matters

Enclosed is a report regarding California-Oregon Transmission Project matters.

10. Report on TANC Technical Matters

Enclosed is a report regarding TANC technical matters.

11. Report on FERC and Related Regulatory Matters

Enclosed is a report regarding Federal Energy Regulatory Commission and other related regulatory matters.

12. Report on WECC Matters

Enclosed is a report regarding Western Electricity Coordinating Council matters.

13. Report on TANC OASIS Matters

Enclosed is a report regarding usage on the Open Access Same-Time Information System and related matters.

14. Report on Wildfire Activities

Enclosed is a report regarding recent wildfire related initiatives.

15. Report on TANC's Reliability Standards Compliance Program

Enclosed is a report regarding TANC's Reliability Standards Compliance Program.

16. Report on CAISO Matters

Enclosed is a report on California Independent System Operator related matters.

17. Report on TANC Strategic Planning Efforts

The Commission will receive a report on the status of workplans associated with ongoing strategic planning efforts.

**INFORMATION ITEMS**

18. Report from the TANC Interim General Manager

The Commission will receive a report from TANC's Interim General Manager.

19. Report on TANC Capital Replacement Plan and Procurement Matters

The Commission will discuss general issues related to the ongoing TANC Capital Replacement Plan and related procurement items.

**ACTION ITEMS**

20. Report and Potential Action Regarding the TANC Long-Term Layoff Agreement Annual Report

The Commission will receive a report and may take action on a presentation on capital expenditures under the Long-Term Layoff Agreement Annual Report.

**CLOSED SESSION**

21. Closed Session Pursuant to Government Code Section 54957.6, Conference with Labor Negotiators: TANC Designated Negotiators - Nick Zettel and Manjot Gill; Unrepresented Employee - Contract Executive/General Manager

**END OF CLOSED SESSION**

**ACTION ITEMS**

22. Resolution Approving a Management Services Agreement

The Commission will discuss and may take action on a resolution approving a Management Services Agreement.

23. Report and Potential Action on Administrative Items

- a. Approval of Update to Officers List for 2025
- b. Hourly Rate Increase for TANC Staff (Guidehouse)

24. Meeting Calendar

The Commission will confirm the date of its next scheduled meeting is May 21, 2025.

MINUTES  
TRANSMISSION AGENCY OF NORTHERN CALIFORNIA  
COMMISSION MEETING  
MARCH 19, 2025

Chair Zettel (City of Redding) called the March 19, 2025 Transmission Agency of Northern California (TANC) Commission meeting to order at 10:00 a.m. Mr. Roukema (TANC Interim General Manager) took a roll call of the Commissioners in attendance. Meeting attendees are listed in Attachment 1.

***Approval of Agenda***

Chair Zettel inquired as to any recommended additions, deletions or modifications to the agenda. With no changes proposed, Ms. Lewis (Sacramento Municipal Utility District) made a motion to approve the March 19, 2025 TANC Commission agenda. Mr. Forsythe (City of Roseville) seconded the motion, which was approved by the TANC Commission. The approved agenda for the March 19, 2025 Commission meeting is included as Attachment 2.

**PUBLIC COMMENT**

Chair Zettel asked if there were any members of the public that wished to address the TANC Commission. There were no requests.

**CONSENT CALENDAR**

Chair Zettel asked if any Commissioner would like a discussion or removal of any item under the Consent Calendar. There were no requests. The approved minutes from the February 19, 2025 TANC Commission meeting are included as Attachment 3.

**INFORMATION ITEMS**

***Report from the TANC Interim General Manager***

Mr. Roukema reported that he is continuing to have discussions regarding the potential for Department of Government Efficiency actions to impact TANC – specifically related to the United State Forest Service and the Western Area Power Administration (WAPA) and potential staffing issues. Ms. Jones (WAPA) reported that WAPA is also considering risk mitigation strategies internally. Mr. Roukema also reminded the TANC Commissioners that the Fair Political Practices Commission Form 700s are due by April 1, 2025.

***Report on TANC Strategic Planning Efforts***

Mr. Roukema reported that updates on strategic planning efforts were provided in the meeting materials and reminded the Commission that the development of new strategic planning items would be paused until TANC secures a regular General Manager to lead the effort.

**ACTION ITEMS**

***Report and Potential Action on TANC's Available Cash Balances***

Mr. Wilson (Sacramento Municipal Utility District) presented a report on TANC's available cash balances through December 31, 2024.

***Resolution Identifying Certain Routine COTP O&M Activities as Categorically Exempt from CEQA***

Mr. Roukema reported that the annual list of Operation and Maintenance (O&M) activities that have been determined to be categorically exempt from the California Environmental Quality Act (CEQA) was presented in the meeting materials. Mr. Roukema further noted that there were no substantial changes to the list of categorically exempt O&M activities since last year. After discussion by TANC Commission, Mr. Gill (Turlock Irrigation District) moved to approve the list of O&M activities determined to be categorically exempt from CEQA. This motion was seconded by Ms. Lewis (Sacramento Municipal Utility District) and approved by the TANC Commission. Resolution 2025-02 is included as Attachment 4.

***Resolution Authorizing the Placement of the 2025-2026 COTP Insurance Program***

Mr. Roukema reported that the Insurance Program for the COTP is set to expire on March 31, 2025, and that TANC has been working with Aon Insurance Services and the Joint TANC/COTP Insurance Task Force on a 2025-2026 COTP Insurance Program. Mr. Roukema also discussed the renewal recommendations and premium costs that were presented at the meeting. After discussion by the TANC Commission, Ms. Lewis (Sacramento Municipal Utility District) moved to approve the placement of the 2025-2026 COTP insurance Program. This motion was seconded by Mr. Forsythe (City of Roseville) and approved by the TANC Commission. Resolution 2025-03 is included as Attachment 5.

***Resolution Adopting the Fiscal Year 2026 COTP Operation and Maintenance (O&M) Budget and Work Plan***

Mr. Roukema presented the Fiscal Year 2026 COTP O&M Budget and Work Plan and provided information on Fiscal Year 2026 budget categories including changes from the current Fiscal Year 2025 budget. After discussion by the TANC Commission, Mr. Gill (Turlock Irrigation District) moved to approve the Fiscal Year 2026 COTP O&M Budget and Work Plan. The motion was seconded by Mr. Caballero (Modesto Irrigation District) and approved by the TANC Commission. Resolution 2025-04 is included as Attachment 6.

**CLOSED SESSION**

Pursuant to subsections (a), (b), and (d) of California Code Section 54956.9, and California Code Section 54957(b)(1), TANC General Counsel Mr. Gross placed the Commission into closed session.

After discussion, Mr. Gross reported that no reportable action was taken by the Commission.

***Report and Potential Action on Administrative Items***

The TANC Commission considered and approved an updated 2025 Officers List.

***Meeting Calendar***

The next regular TANC Commission meeting is scheduled for April 23, 2025. There being no further business, Chair Zettel adjourned the meeting.

Respectfully Submitted,

DocuSigned by:

A blue DocuSign signature box containing the handwritten name "John Roukema" in black ink.

John Roukema

TANC Interim General Manager

RESOLUTION 2025-05

A RESOLUTION OF THE  
TRANSMISSION AGENCY OF NORTHERN CALIFORNIA  
APPROVING A MANAGEMENT SERVICES AGREEMENT  
FOR TANC'S CONTRACT EXECUTIVE/GENERAL MANAGER

WHEREAS, the Transmission Agency of Northern California (TANC) is a joint exercise of powers agency organized under the laws of the State of California; and

WHEREAS, TANC has run under the leadership of a General Manager or a Contract Executive since TANC Resolution 2006-16 was adopted by the TANC Commission; and

WHEREAS, since September 1, 2024, TANC has run under the leadership of an Interim General Manager and the TANC Commission Chair; and

WHEREAS, TANC now wished to enter into a Manager Services Agreement for a regular Contract Executive/General Manager of TANC; and

NOW, THEREFORE, BE IT HEREBY RESOLVED by the Commission of the Transmission Agency of Northern California, that the Interim General Manager or the TANC Chair is authorized to execute the Management Services Agreement for a regular Contract Executive/General Manager of TANC, based on a form of agreement that has been reviewed and approved by TANC's General Counsel.

PASSED AND ADOPTED this 23<sup>rd</sup> day of April 2025 on a motion by Mr. Forsythe (City of Roseville), seconded by Mr. Gill (Turlock Irrigation District).

	AYES	NOES	ABSTAIN	ABSENT
City of Alameda	X			
City of Biggs	X			
City of Gridley	X			
City of Healdsburg	X			
City of Lodi	X			
City of Lompoc	X			
Modesto Irrigation District	X			
City of Palo Alto	X			
Plumas-Sierra Rural Electric Cooperative	X			
City of Redding	X			
City of Roseville	X			
Sacramento Municipal Utility District	X			
City of Santa Clara	X			
Turlock Irrigation District	X			
City of Ukiah	X			

**TAB 6**

**REPORT ON TANC'S INVESTMENT PURCHASES**

Enclosed is a report on TANC's investment purchases.

# Transmission Agency of Northern California

## Investment Purchases Report For Month Ended April 30, 2025

<u>Settlement Date</u>	<u>Maturity Date</u>	<u>Portfolio</u>	<u>Investment Type</u>	<u>Issuer</u>	<u>Par Value</u>
----------------------------	--------------------------	------------------	------------------------	---------------	----------------------

No purchases in April 2025

**TAB 7**

**SCHEDULE OF UPCOMING  
GENERAL MANAGER'S COMMITTEE MEETINGS**

Contracts Committee	June 3, 2025
Engineering and Operations Committee	July 9, 2025
Open Access Transmission Tariff Committee	June 3, 2025

**GENERAL MANAGER'S COMMITTEE MEETINGS  
APPROVED MINUTES**

Engineering and Operations Committee	January 8, 2025
--------------------------------------	-----------------

**MINUTES  
CALIFORNIA-OREGON TRANSMISSION PROJECT  
ENGINEERING AND OPERATIONS COMMITTEE MEETING  
JANUARY 8, 2025**

The California-Oregon Transmission Project (COTP) Engineering and Operations (E&O) Committee met on November 13, 2024. The Agenda and Attendance list for the meeting are provided as Attachment 1 and Attachment 2, respectively.

**COTP E&O COMMITTEE MEETING**

**AGENDA ITEM 1, 2, AND 3: CALL TO ORDER, ROLL CALL, AND ADMINISTRATION**

a. Approval of Agenda

The meeting was called to order by Chair Tuggle (Western Area Power Administration (WAPA)). Chair Tuggle asked if there were any changes to the meeting agenda. With no changes requested, Mr. Corulli (City of Roseville) moved to approve the agenda. The agenda was then approved by the COTP E&O Committee and is included as Attachment 1.

b. Minutes of the November 13, 2024 COTP E&O Committee Meeting

Chair Tuggle asked if there were any changes to the draft minutes from the November 13, 2024 COTP E&O Committee meeting. With no changes proposed, Chair Tuggle (WAPA) moved to approve the minutes. The November 13, 2024 minutes were then approved by the COTP E&O Committee. The approved minutes are included as Attachment 3.

c. Next Meeting

The next COTP E&O Committee meeting was scheduled for Wednesday, March 12, 2025.

**AGENDA ITEM 4: OPERATIONS AND MAINTENANCE ISSUES**

a. COTP Operations Update

The COTP E&O Committee discussed information on COTP operations and voltage control events for both November and December 2024.

b. Line and Substation Outages – Occurred and Scheduled

The COTP E&O Committee discussed recent and planned outages of COTP facilities were provided in a recent email and it was reported that WAPA was available to answer any questions.

c. Update on Environmental and Land Activities

Mr. Wagenet (TANC) provided the COTP E&O Committee with a general overview of Reclamation District 2024, including its location, general business activities, and relevance to

TANC's ownership of Palm Tract 'B' (i.e. the east side of Palm Tract). Mr. Wagenet also provided an update on wildfire mitigation activities including an update on progress made in 2024 by the Modoc and Shasta-Trinity National Forests to reduce wildfire risks to the COTP. Mr. Wagenet reported on the status of the Deep Refuge Restoration Project, which is a fuels reduction and habitat improvement project being planned for 11,787 acres within the Modoc National Forest and is expected to reduce wildfire risks to the Pacific Alternating Current Intertie transmission lines. The COTP E&O Committee also discussed the Sattitla National Monument, which was recently established in northern California near the Medicine Lake Highlands, in an area of cultural significance to the Pit River Tribe. Mr. Wagenet also reported that any rights to operate and maintain the COTP would not be impacted.

d. Other Operation and Maintenance Issues

Chair Tuggle and Mr. Hamrick (WAPA) provided the COTP E&O Committee with an update on Operation and Maintenance activities completed by WAPA since the last meeting including updates on routine operation and maintenance activities, engineering, capital replacement, and construction projects. The COTP E&O Committee also discussed the schedule for and status of the series capacitor replacement project.

e. Transmission Planning and Technical Study Activities Update

Mr. Ziegler (TANC) provided an update on transmission planning items noting that the California Independent System Operator had notified TANC that the California-Oregon Intertie (COI) path rating increase to 5,100 megawatts would be implemented for the Summer COI operating study which begins on April 1, 2025. Mr. Riegle (TANC) reported that TANC is implementing a plan to complete the necessary tasks for the rerate, which includes modifying multiple TANC/COTP agreements. Mr. Ziegler also reported that the 2024 TANC Annual Planning Assessment was finalized on December 31, 2024 and that a copy was provided with the meeting materials. Lastly, it was reported that a status update of both active TANC interconnection queue projects and proposed projects where the COTP may be affected by a proposed interconnection or addition of facilities to another transmission system will be provided to the COTP E&O Committee going forward.

**AGENDA ITEM 5: OTHER ITEMS FOR DISCUSSION**

a. COI Real-Time Operations Update

Mr. Buckingham (Sacramento Municipal Utility District (SMUD)) provided the highlights on recent COI real-time operations updates and provided the E&O Committee with November and December 2024 Balancing Authority of Northern California reports which included information on COI flows both South to North and North to South as well as unscheduled flows.

b. COTP Capital Replacement Project Update

The COTP E&O Committee discussed the status of the COTP Capital Replacement Project and WAPA noted that detailed reports will be developed and provided to the committee as a regular agenda item at future meetings. The committee also discussed developing a surplus equipment transaction plan for future use.

**AGENDA ITEM 6: APPROVALS AND RECOMMENDATIONS**

a. Request from the Western Area Power Administration to Carry-Over Certain Fiscal Year 2024 Funds to Fiscal Year 2025

Ms. Mull (WAPA) reported that WAPA has no need to carry over funds at this time and requested that the agenda item be removed. Mr. Buckingham (SMUD) suggested that it would be helpful for the COTP E&O Committee to see regular reports on unspent funds. Ms. Mull will investigate providing this information at future meetings.

**AGENDA ITEM 7: PROJECT COST**

a. Status of Operations & Maintenance Costs – Fiscal Year 2024

Ms. Mull (WAPA) provided a detailed status of WAPA's Fiscal Year 2025 budget and expenditures.

**AGENDA ITEM 7: COTP E&O MEETING ADJOURNMENT**

There being no further business, Chair Tuggle adjourned the meeting.

Respectfully Submitted,

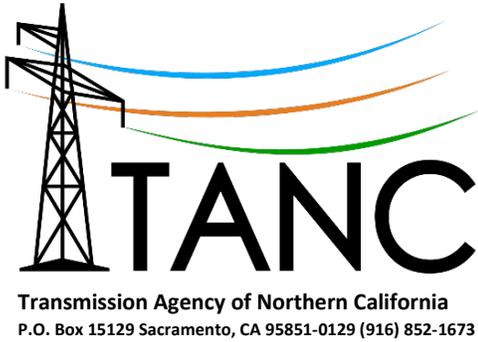
Signed by:



Steve Tuggle

571AC36365594C1...

COTP E&O Chair



## MEMORANDUM

DATE: May 14, 2025

TO: TANC Commission

FROM: John Roukema  
Interim General Manager

SUBJECT: REPORT ON WESTCONNECT ACTIVITIES

---

This memo provides a summary of recent WestConnect activities. The Transmission Agency of Northern California (TANC) continues to participate in activities conducted by WestConnect, which is tasked with coordination of regional and interregional transmission planning. The most recent Planning Subcommittee (PS) meetings were held on March 18, 2025 and April 15, 2025. The most recent Planning Management Committee (PMC) meetings were held on March 19, 2025 and April 16, 2025. The next PS and PMC meetings are scheduled for May 20 and 21, 2025.

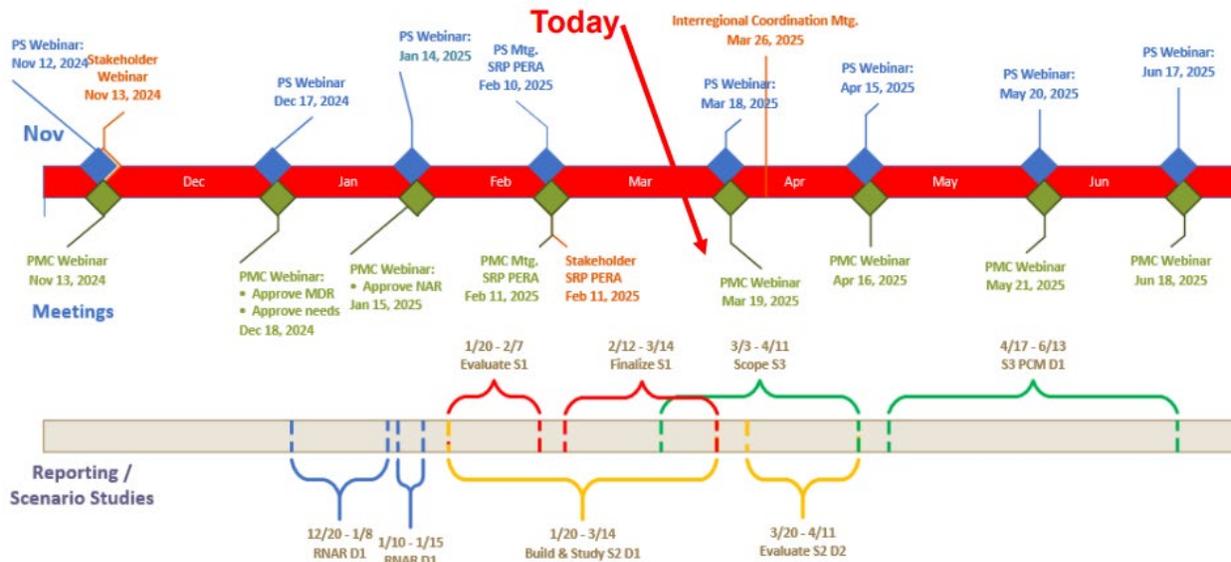
### **Planning Subcommittee**

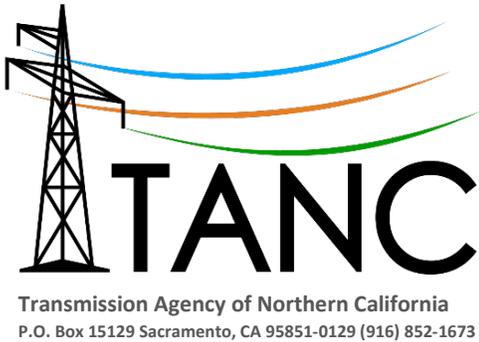
At their meeting on April 15, 2025 the PS discussed and shared the results of the second draft of the Extreme Cold Weather Scenario study. The PS had previously approved scenario planning for three special scenarios including: a Decreased Facility Rating Scenario, an Extreme Cold Weather Scenario, and a 20-Year Increased Renewable Scenario. Based on feedback from members, the dispatch of certain generators was also changed in the Extreme Cold Weather Scenario study to alleviate identified issues as the second draft study identified approximately 29 overloads. None of these overloads were on TANC's system or on the California-Oregon Intertie. The PS also discussed the status of the 20-Year Increased Renewable Scenario which is in development and being created from the 2045 high renewable Production Cost Model. This scenario is meant to simulate high congestion and high flow for the WestConnect Members. The plan is to have the 20-Year Increased Renewable Scenario study completed by the end of June.

### Planning Management Committee

At their meeting on April 16, 2025 the PMC discussed a change to the Chair position. Mr. Flores (Xcel Energy) vacated his seat as PMC Chair at the end of March 2025. Mr. Kitterman, who is currently the PMC Vice Chair, offered to nominate himself to fill the Chair position. The PMC then moved to approve Mr. Kitterman as PMC Chair for the remainder of the 2024-2025 Planning Cycle. Mr. Rombough (Black Hills) also volunteered to step in to take over the position as Chair of the Cost Allocation Subcommittee. The PMC also approved this motion. The PMC Vice Chair position currently remains open. The current schedule is shown below:

## Q1-Q2 2025 Schedule





## MEMORANDUM

DATE: May 14, 2025

TO: TANC Commission

FROM: John Roukema  
Interim General Manager

SUBJECT: REPORT ON COTP MATTERS

---

Recent California-Oregon Transmission Project (COTP) environmental and land matters and permit and land transmission line activities pertaining to the Transmission Agency of Northern California (TANC) have included:

### **Vegetation Management**

#### *2025 Governor's Emergency Proclamation to Streamline Vegetative Fuels Reduction Projects*

On March 1, 2025 Governor Newsom issued an Emergency Proclamation that authorizes the Secretaries of the California Natural Resources Agency (CNRA) and the California Environmental Protection Agency (CalEPA) to determine which projects are eligible for suspension of certain State of California statutory and regulatory requirements to expedite critical fuels reduction projects, while at the same time protecting public resources and the environment. A project is eligible to operate under the suspension of state laws if it meets all four of the following requirements:

1. The primary objective of the project is at least one of these activities:
  - Removal of hazardous, dead, and/or dying trees.
  - Removal of vegetation for the creation of strategic fuel breaks as identified by approved fire prevention plans, including without limitation, California Department of Forestry and Fire (CAL FIRE) Protection Plans or Community Wildfire Preparedness Plans.
  - Removal of vegetation for community defensible space.
  - Removal of vegetation along roadways, high-ways, and freeways for the creation of safer ingress and egress routes for the public and responders and/or to reduce roadside ignitions.
  - Removal of vegetation using cultural traditional ecological knowledge for cultural

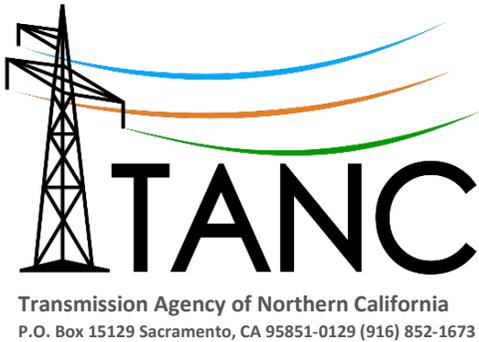
- burning and/or prescribed fire treatments for fuels reduction, or
  - Maintenance of previously established fuel breaks or fuels modification projects.
2. The request for suspension is submitted in the 2025 calendar year.
  3. Work will be performed or supervised by qualified responsible parties, such as Registered Professional Foresters, Certified Rangeland Managers, qualified vegetation management contractors, qualified incident commanders, certified arborists, certified burn bosses and authorized cultural burners.
  4. Work will follow Best Management Practices and measures identified in the Statewide Fuels Reduction Environmental Protection Plan.

Projects that receive suspension must focus on critical fuels reduction to combat catastrophic fires and promote community safety and resiliency. This includes, but is not limited to, projects identified in CAL FIRE Unit Fire Plans, Community Wildfire Preparedness Plans, and Utility Wildfire Mitigation Plans provided they meet the objectives above.

Two of the Wildfire Prevention, Mitigation, and Response Strategies (Wildfire Strategies) in the 2025 TANC-COTP Wildfire Mitigation Plan address reducing risks from the accumulation of fuels near the COTP right of way and expanding TANC's collaboration with state agencies – particularly CAL FIRE. TANC will pursue available opportunities to take advantage of this suspension as discussions proceed with CAL FIRE regarding those two Wildfire Strategies.

#### **Communication Site Activities**

In April 2025, TANC and the Sacramento Municipal Utility District (SMUD) finalized a license agreement for the equipment that TANC has located at the SMUD Rancho Seco site – including microwave antennas on the cooling tower and associated relay equipment in the microwave room. TANC made no changes or modifications to the existing equipment located at Rancho Seco associated with the license agreement. The agreement is also a no-cost agreement.



## MEMORANDUM

DATE: May 14, 2025

TO: TANC Commission

FROM: John Roukema  
Interim General Manager

SUBJECT: REPORT ON FERC AND OTHER REGULATORY MATTERS

---

This memorandum provides an update on regulatory issues either at the Federal Energy Regulatory Commission (FERC) or other regulatory matters occurring at the federal or state level that are relevant to the Transmission Agency of Northern California (TANC) and its Members.

### **Commission Membership Update**

FERC Commissioner Willie Phillips, a Democrat and former FERC Chair, announced his resignation in early May 2025. His departure leaves the Commission evenly split, with two Democrats and two Republicans. President Trump will need to appoint a replacement for this role. In addition, FERC Chair (Republican) Mark Christie's term is also set to expire in June, adding further uncertainty to the FERC Commission.

### **Executive Orders Related to Energy Policy**

On April 8, 2025, President Trump issued three executive orders (EO) regarding energy policy. The three EOs are: 1) Protecting American Energy from State Overreach, 2) Strengthening the Reliability and Security of the United States Electric Grid, and 3) Reinvigorating America's Beautiful Clean Coal Industry and Amending EO 14241.

The purpose of the "Protecting American Energy from State Overreach" EO is what the Trump administration describes as "illegitimate impediments to the identification, development, siting, production, investment in, or use of domestic energy resources — particularly oil, natural gas, coal, hydropower, geothermal, biofuel, critical mineral, and nuclear energy resources." The EO would direct the Attorney General and other executive officials to identify all state and local laws,

A Public Entity whose Members include:  
Alameda, Biggs, Gridley, Healdsburg, Lodi, Lompoc, Modesto Irrigation District,  
Palo Alto, Plumas-Sierra Rural Electric Cooperative, Redding, Roseville,  
Sacramento Municipal Utility District, Santa Clara, Turlock Irrigation District, Ukiah

regulations, causes of action, policies, and practices that burden the developing, producing, or using of domestic energy resources.

The purpose of the "Strengthening the Reliability and Security of the United States Electric Grid" EO is to increase the reliability of the nation's electrical grid by utilizing all available power generation resources, including secure and redundant fuel supplies. Additionally, it mandates the Secretary of Energy to streamline processes for issuing orders, including the review and approval of applications by electric generation resources seeking to operate at maximum capacity.

The "Reinvigorating America's Beautiful Clean Coal Industry and Amending EO 14241" aims to increase domestic energy production, specifically coal, by declaring it a critical mineral. The EO directs agencies to remove existing regulatory barriers and prioritize coal leasing on federal lands.

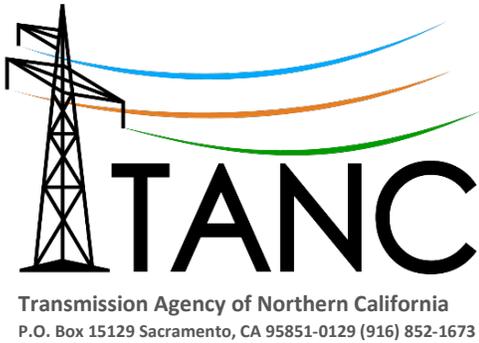
### **Zero-Based Regulatory Budgeting Executive Order**

On April 9, 2025, President Trump signed the "Zero-Based Regulatory Budgeting to Unleash American Energy" EO which directs applicable agencies to incorporate a sunset provision into their regulations governing energy production to the extent permitted by law, thus compelling those agencies to reexamine their regulations periodically to ensure that those rules serve the public good.

In accordance with the EO, applicable agencies are required to issue a sunset rule, effective not later than September 30, 2025, that inserts a Conditional Sunset Date (of one year after the effective date of the sunset rule) into each of their existing covered regulations. Any new covered regulations shall include a Conditional Sunset Date that is not more than 5 years in the future.

The sunset provision added to existing and new covered regulations also provides that the applicable agency will offer the public an opportunity to comment on the costs and benefits of each regulation, prior to a rule's expiration, and following such opportunity the Conditional Sunset Date for that Covered Regulation may be extended - if the agency finds an extension is warranted - for up to a date more than 5 years in the future.

This EO also states that neither a determination to extend the Conditional Sunset Date of a particular regulation, nor a regulation that expires as a result this order, shall count towards the ten-for-one regulatory requirement in January 31, 2025 EO 14192 (Unleashing Prosperity Through Deregulation). EO 14192 mandates that for every new regulation proposed by a federal agency, at least 10 existing regulations must be repealed. This order aims to reduce the cost of compliance with federal regulations, claiming to alleviate unnecessary burdens on American citizens and businesses.



## MEMORANDUM

DATE: May 14, 2025

TO: TANC Commission

FROM: John Roukema  
Interim General Manager

SUBJECT: WESTERN ELECTRICITY COORDINATING COUNCIL MATTERS

---

This memorandum provides an update on the relevant matters pertinent to the Western Electricity Coordinating Council (WECC) including its various committees and subcommittees.

### **Reliability Assessment Committee**

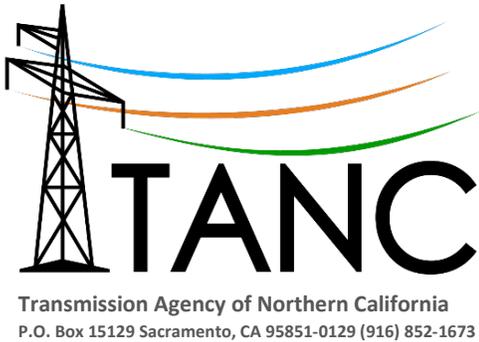
At their April 15, 2025 monthly meeting, the Reliability Assessment Committee (RAC) discussed the new additions to the WECC Risk Register. This discussion included looking at generation resource mix impacts to future congestion, inadequate interconnection requirements and commissioning, modeling quality issues and planning case accuracy as risks for the Western Interconnect. The RAC discussed how these risks should be incorporated into the risk register. Following this discussion, the RAC discussed the July 7-8 RAC meeting agenda.

### **Long-Term Transmission Planning Task Force**

In early 2024, the Joint Guidance Committee ratified the creation of the Long-Term Planning Task Force (LTPTF) and endorsed the LTPTF charter. According to the charter, the purpose of the LTPTF is to submit recommendations to the RAC regarding aspects of long-term planning, complete with the following: 1) a defined modeling approach; 2) assumptions concerning load, resources, and transmission; 3) datasets; 4) tools; 5) scenarios; and 6) a data request for the first long-term interconnection-wide model. At their April 24, 2025, meeting, outside of routine administrative items, the LTPTF primarily reviewed and discussed the System Review Subcommittee Data Preparation Manual.

A Public Entity whose Members include:

Alameda, Biggs, Gridley, Healdsburg, Lodi, Lompoc, Modesto Irrigation District,  
Palo Alto, Plumas-Sierra Rural Electric Cooperative, Redding, Roseville,  
Sacramento Municipal Utility District, Santa Clara, Turlock Irrigation District, Ukiah



## MEMORANDUM

DATE: May 14, 2025

TO: TANC Commission

FROM: John Roukema  
Interim General Manager

SUBJECT: REPORT ON TANC OASIS MATTERS

---

The Transmission Agency of Northern California (TANC) allows third party transmission sales on its portion of the California-Oregon Transmission Project via TANC's Open Access Same-Time Information System (OASIS) wesTTrans web portal. These sales pertain strictly to Project Agreement No. 5 (PA-5) Member participation.

Enclosed is a bar graph indicating PA-5 Member third party OASIS sales on a monthly basis since 2021, in addition there are pie charts indicating monthly sales through March 2025 as well as year-to-date 2025 sales. A second bar graph includes calendar year sales from 2021 through March 2025. Additionally, another report is provided, indicating megawatt-hour sales in a format similar to revenue sales. Buy-backs and excess capacity purchases by TANC PA-5 Members are not included.

TANC's third party transmission sales in March totaled \$10,581. The 2025 Year-to-Date sales through March were \$137,071.

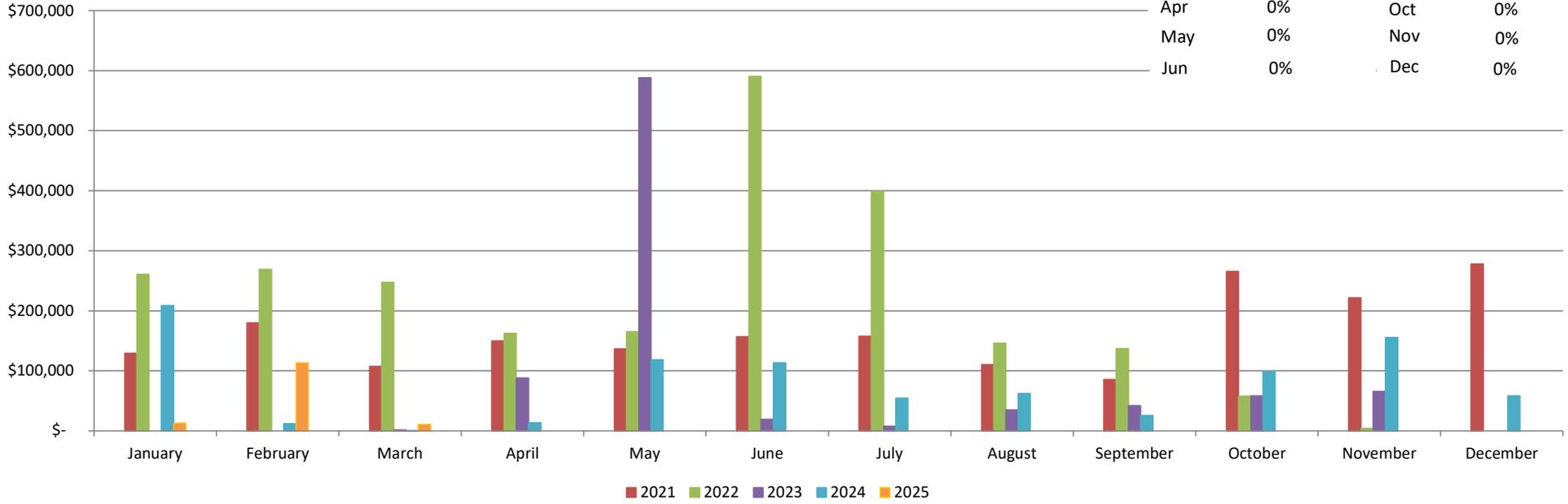
Enclosures

**2025 TANC OASIS (PA-5) Annual Revenue Third Party Sales\***

**Monthly percentage of the YTD Total Revenue**

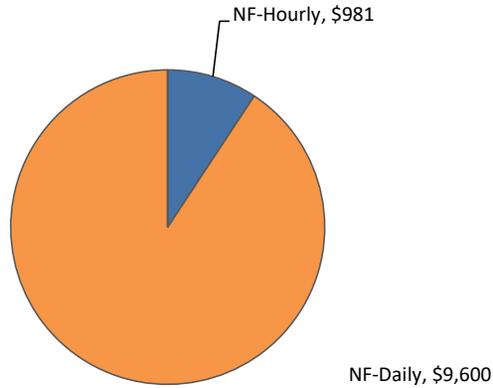
Jan	9%	Jul	0%
Feb	83%	Aug	0%
Mar	8%	Sep	0%
Apr	0%	Oct	0%
May	0%	Nov	0%
Jun	0%	Dec	0%

**Historical OASIS Sales & Percentages for March 2025  
2021-2025**



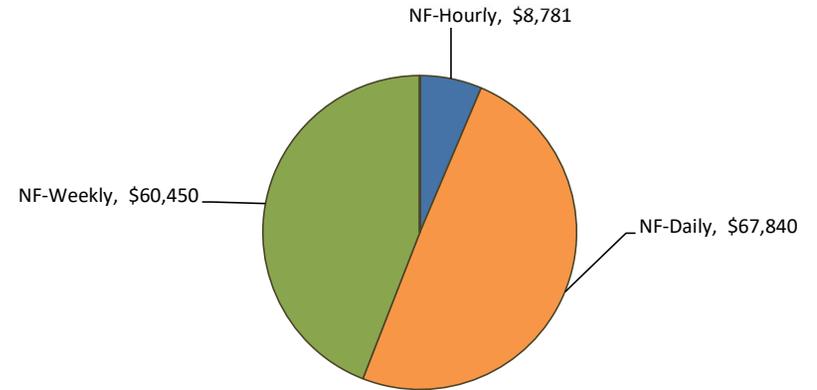
**2025 Product Sales**

Total March Sales \$10,581



**2025 YTD Product Sales**

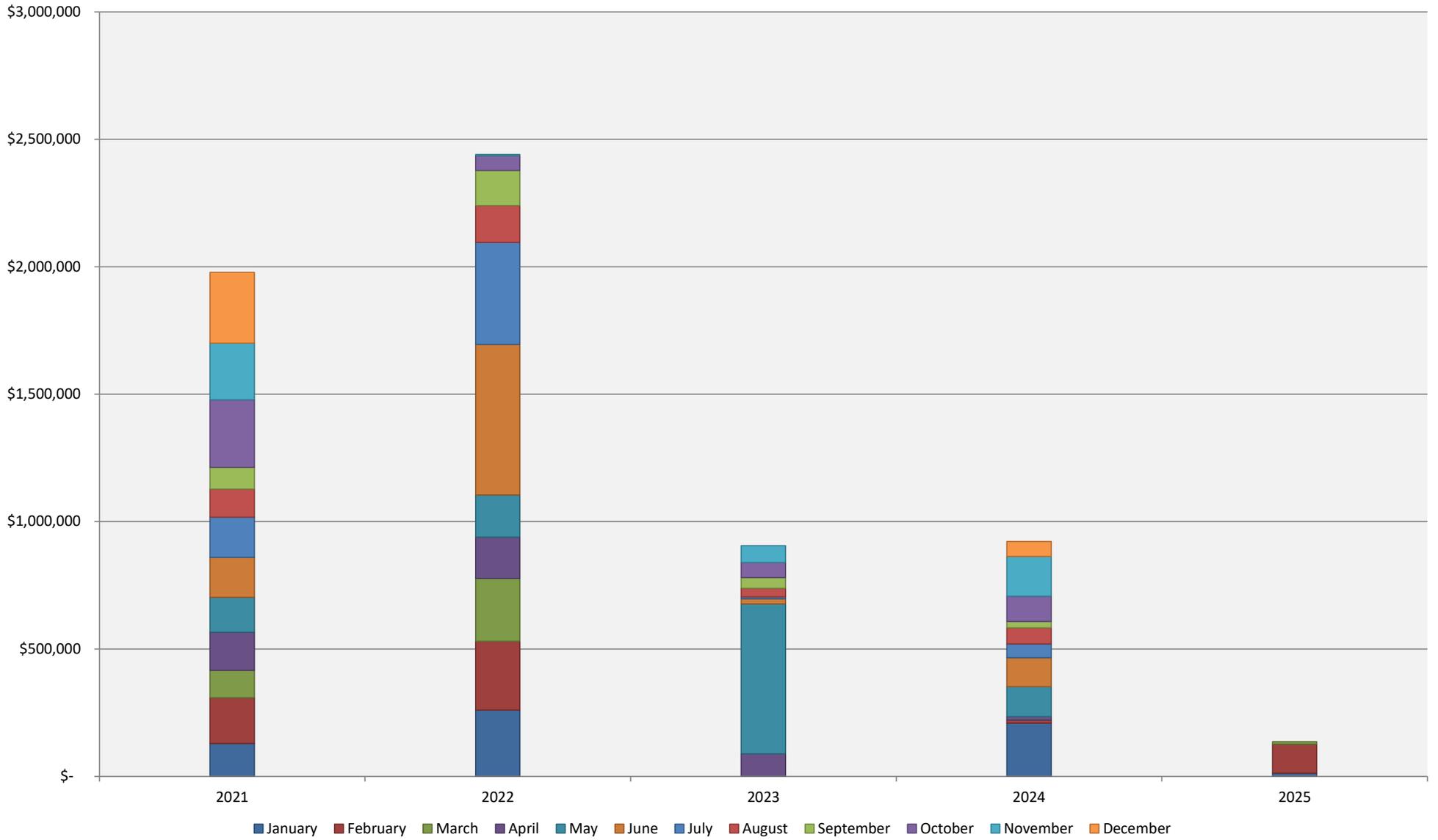
Total 2025 Sales \$0.14M



\* Includes OASIS sales data through March 2025. Does not include buy-backs or excess capacity purchases by TANC OASIS participants

2025 TANC OASIS (PA-5) Annual Revenue from Third Party Sales\*

Monthly Historical OASIS Sales  
January 2021 - March 2025



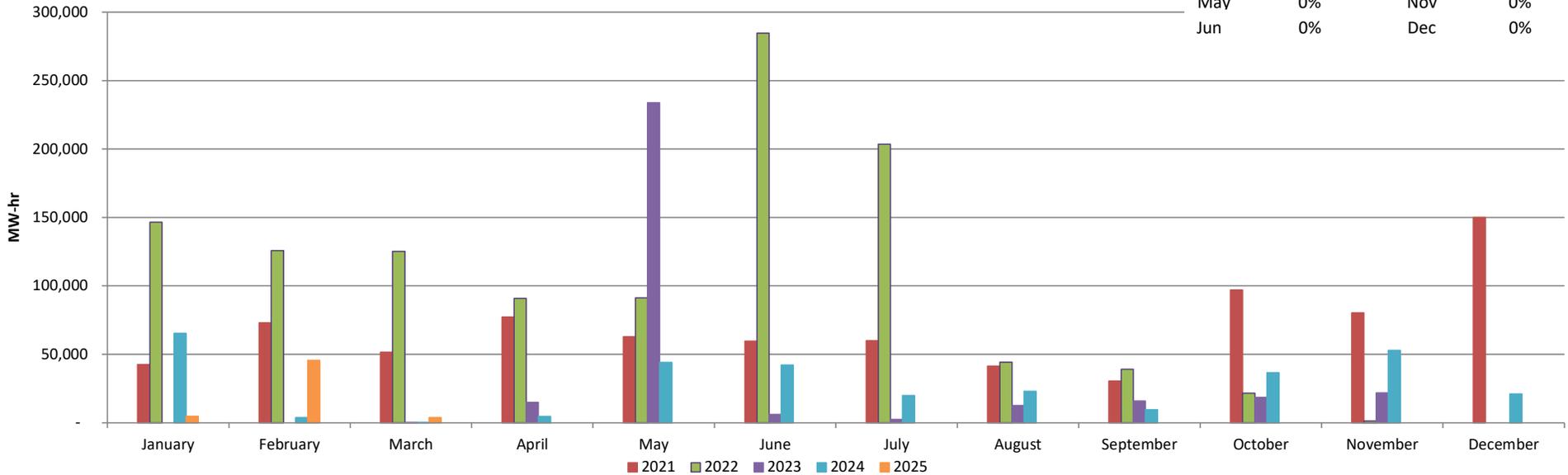
\* Includes OASIS sales data through March 2025. Does not include buy-backs or excess capacity purchases by TANC OASIS participants

2025 TANC OASIS (PA-5) Annual MWh Third Party Sales\*

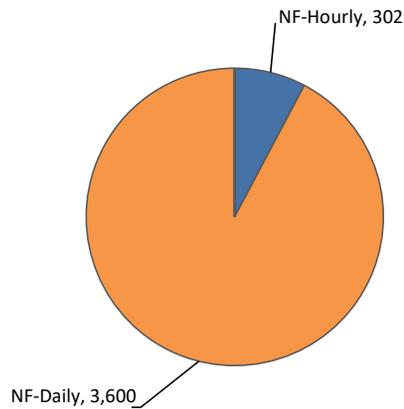
Monthly percentage of the YTD Total MWhr

Jan	9%	Jul	0%
Feb	84%	Aug	0%
Mar	7%	Sep	0%
Apr	0%	Oct	0%
May	0%	Nov	0%
Jun	0%	Dec	0%

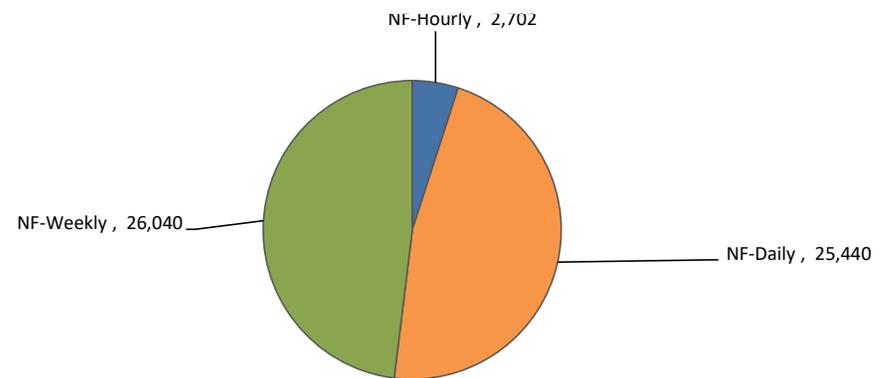
Historical OASIS Sales & Percentages for March 2025  
2021-2025



2025 MWh Sales  
Total March Sales 3,902 MWh



2025 YTD MWh Product Sales  
Total 2025 Sales 54.18 GWh

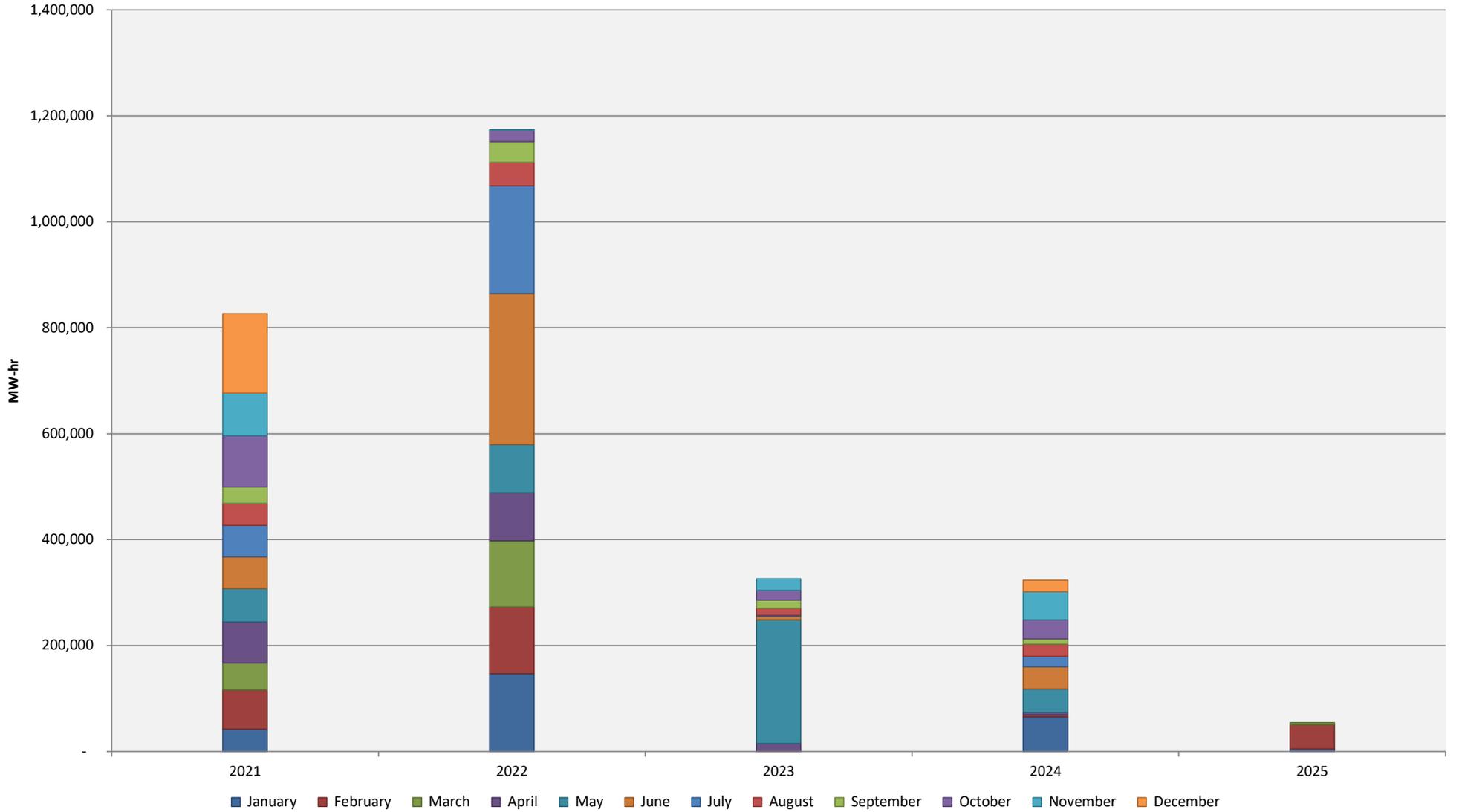


\* Includes OASIS sales data through March 2025. Does not include buy-backs or excess capacity purchases by TANC OASIS participants  
Includes sales only, does not include actual scheduled energy.

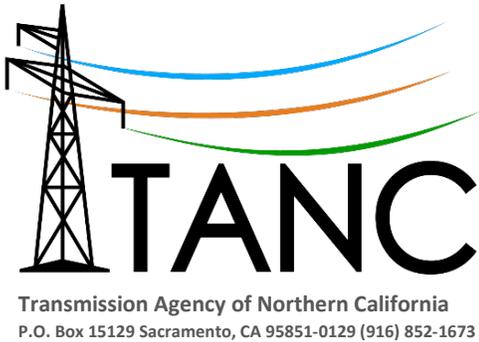
2025 TANC OASIS (PA-5) Annual MWh Third Party Sales\*

Monthly Historical OASIS Sales

January 2021 - March 2025



\* Includes OASIS sales data through March 2025. Does not include buy-backs or excess capacity purchases by TANC OASIS participants  
Includes sales only, does not include actual scheduled energy.



## MEMORANDUM

DATE: May 14, 2025

TO: TANC Commission

FROM: John Roukema  
Interim General Manager

SUBJECT: REPORT ON CAISO MATTERS

---

This memorandum provides an update on issues at the California Independent System Operator (CAISO) that are relevant to the Transmission Agency of Northern California (TANC).

### **Annual Policy Initiative Catalog**

On April 3, 2025, the CAISO hosted a prioritization workshop to discuss the 2025 Annual Policy Initiative proposals, which included: 1) Energy Imbalance Market (EIM) Settlement Enhancements – proposed by the Bonneville Power Administration; 2) Real-time Congestion Offset Enhancements – proposed by the CAISO, 3) Uplift and Ancillary Services for Battery Energy Storage System Resources – proposed by NextEra, 4) Flexible Ramping Enhancements – proposed by PacifiCorp, 5) Extended Day-Ahead Market (EDAM) Intertie Bidding – proposed by Vitol, and 6) Market Seams and various EDAM Enhancements – proposed by Western Power Trading Forum. The Final Policy Initiative Catalog will be released in June 2025.

### **Federal Energy Regulatory Commission Order 881**

On April 8, 2025, CAISO provided an update on its implementation plans for Order 881 compliance. Federal Energy Regulatory Commission (FERC) Order 881 is a rule designed to improve the accuracy and transparency of electric transmission line ratings by requiring that transmission providers use Ambient Adjusted Ratings (AARs) when evaluating near-term transmission service requests. CAISO reported some delays with the development of the WebLineR tool and its implementation settings, for tracking both Seasonal Ratings and AARs. An updated timeline includes a January 2026 target for enabling AARs in the EIM, an April 2026 target for the use of AARs by dual EDAM and EIM participants, and a December 2026 target for California-Oregon Intertie and other Path Limit calculations.

A Public Entity whose Members include:

Alameda, Biggs, Gridley, Healdsburg, Lodi, Lompoc, Modesto Irrigation District,  
Palo Alto, Plumas-Sierra Rural Electric Cooperative, Redding, Roseville,  
Sacramento Municipal Utility District, Santa Clara, Turlock Irrigation District, Ukiah

On April 30, 2025, FERC accepted CAISO's request for an extension of compliance dates, including a December 2026 internal compliance deadline and an October 2027 deadline for Participating Transmission Owners.

### **Transmission Development Forum**

On April 9, 2025, CAISO hosted the bi-annual Transmission Development Forum (TDF), providing status updates on projects previously approved via the Transmission Planning Process as well as Network Upgrades identified via interconnection procedures. The California Public Utilities Commission (CPUC) presented a report on projects that are either delayed or at-risk of delay within both the Southern California Edison (SCE) and Pacific Gas & Electric (PG&E) queues. There are no reported delays within San Diego Gas & Electric Company queue. SCE and PG&E both presented several process improvements related to interconnection processing, advance procurement of critical equipment, grid planning, and others.

### **2024-2025 Transmission Planning Process**

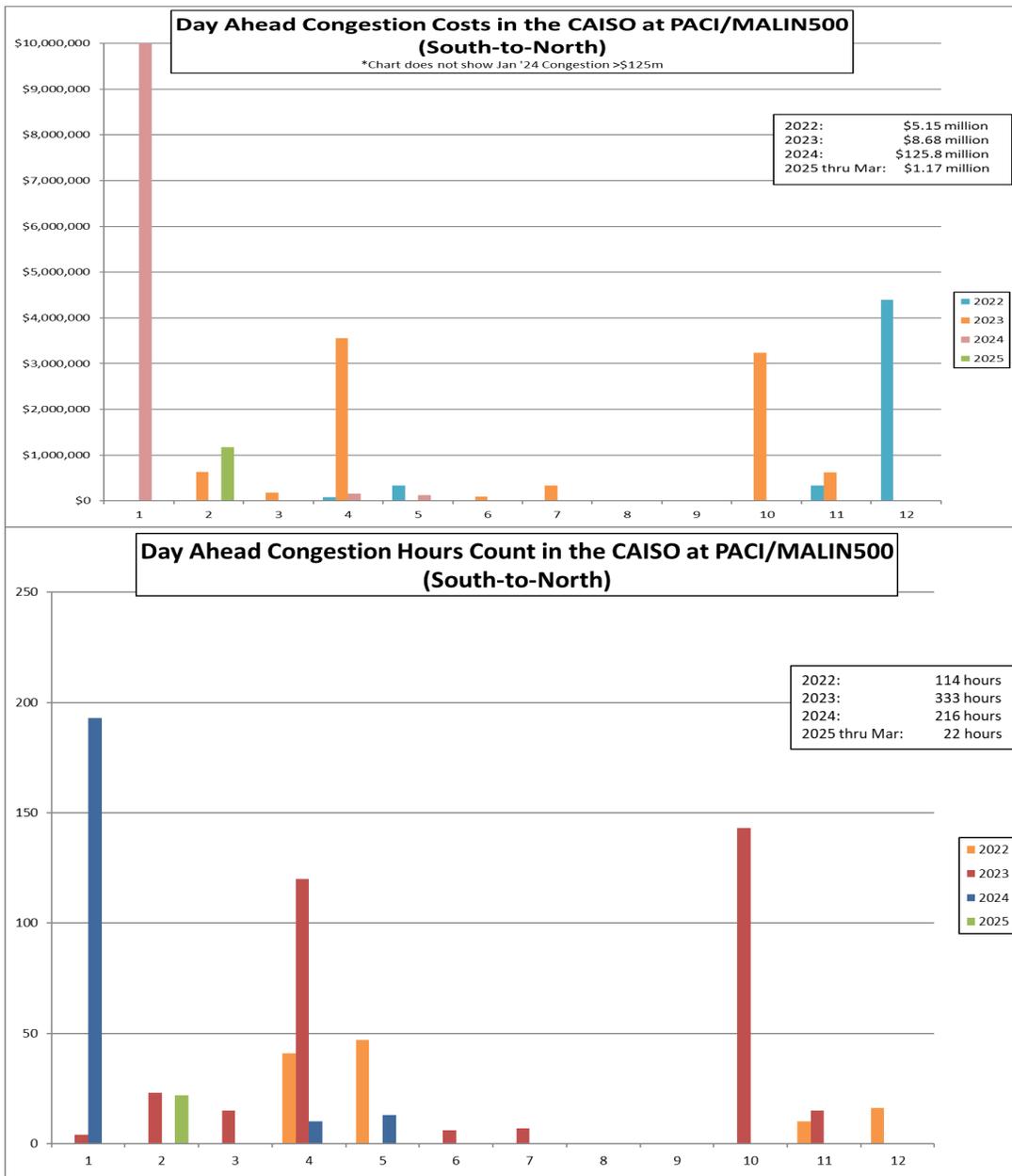
On April 15, 2025, CAISO presented the Draft Final 2024-2025 Transmission Plan. There was a total of 31 projects that were identified, with a estimated cost of \$4.8 billion. Of the 31 projects, 28 were reliability projects with an estimated cost of \$4.56 billion and three were policy projects with a cost of \$290 million. There were no economic-driven projects included in the plan. Also, there were two projects identified as eligible for competitive solicitation, including the Metcalf-Manning 500 kilovolt (kV) line project. The plan identified the Greater Bay Area as a significantly increasing peak demand growth zone. The plan also declared 1,607 megawatts of Reserved Transmission Plan Deliverability for off-shore wind resources in the North Coast region, likely through the Humboldt-Fern Road 500 kV system. This Reserved Deliverability is classified under the Long Lead-Time Resource designation and extends out to the 2039 portfolio year.

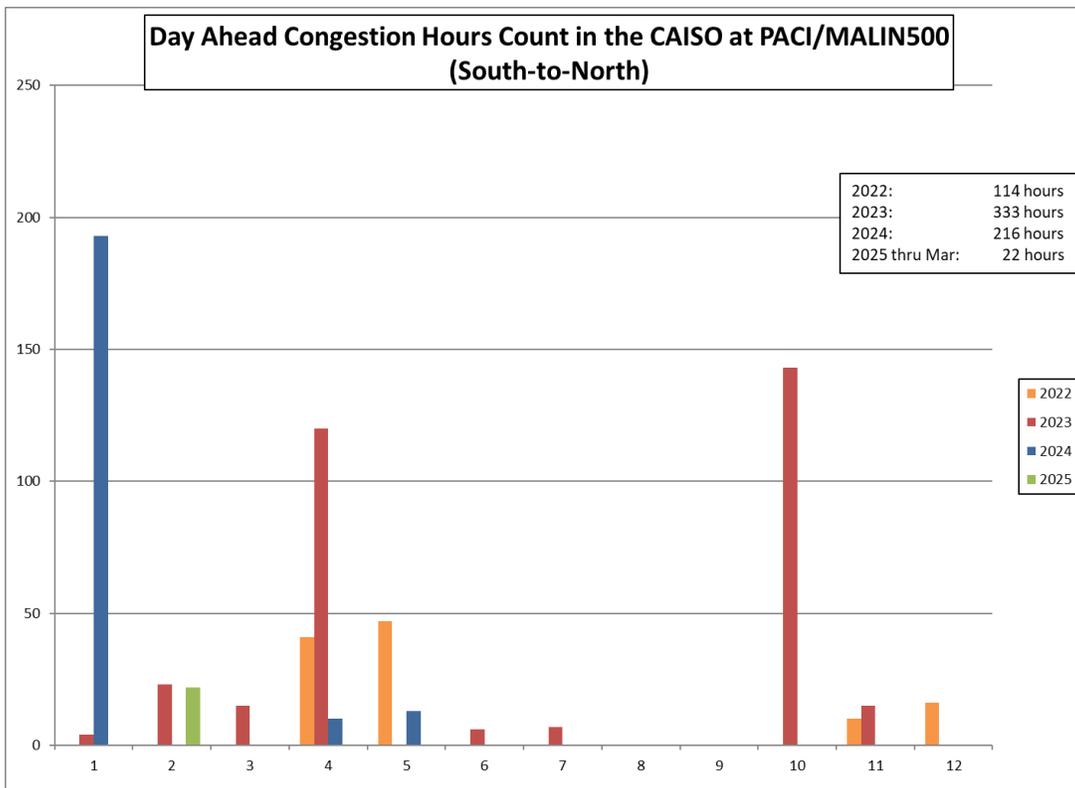
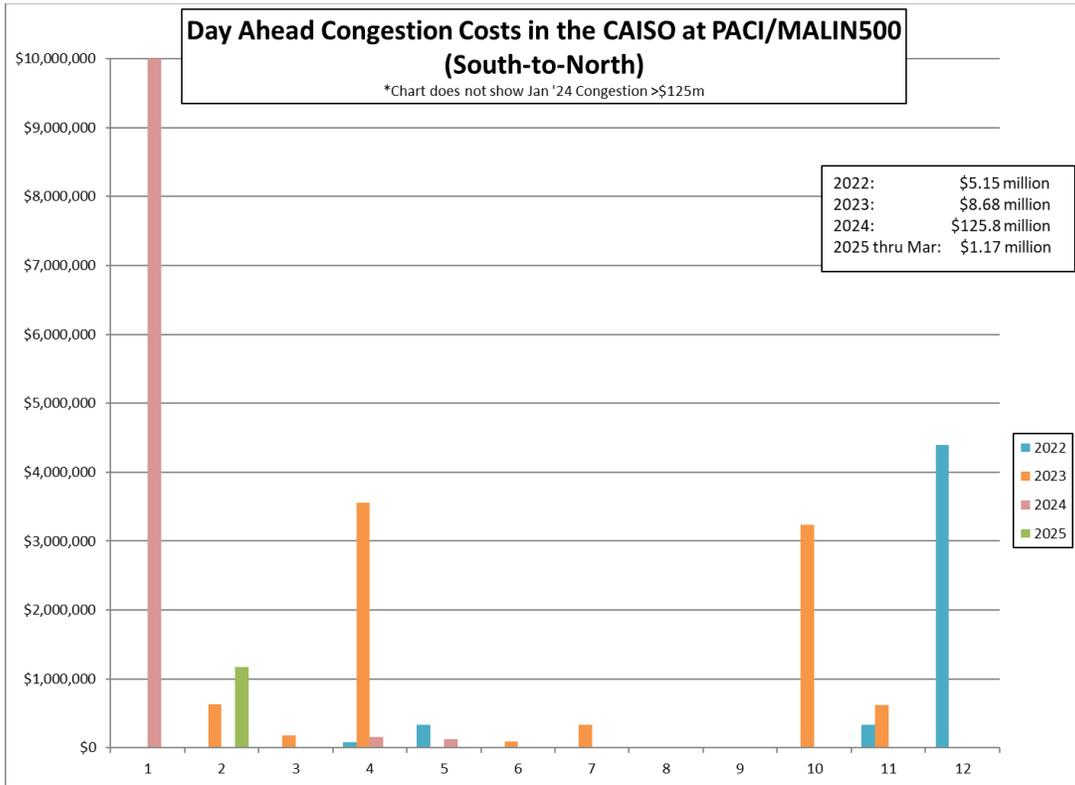
### **Extended Day-Ahead Market**

On April 23, 2025, CAISO hosted a stakeholder workshop focused on revising the EDAM Congestion Revenue Allocation methodology. During the meeting, CAISO presented and discussed their Draft Final Proposal for a "transitional" congestion revenue allocation design that will replace the previously FERC-approved provisions in the EDAM section of their tariff. The Draft Final proposal design would allocate EDAM Congestion Revenue first by Open Access Transmission Tariff rights exercised in the EDAM, with any remaining congestion revenue allocated back to Balancing Authority Areas where transmission constraints were modeled in the day-ahead market clearing. The CAISO anticipates using a transitional design for one to two years while developing a final or permanent design by the end of year three. A Final Transitional Proposal will be presented to the Board of Governors at the May 20-22, 2025 meetings, with a FERC filing to follow shortly thereafter.

### Congestion

In March 2025, North-to-South congestion at Malin totaled \$553,163 over 47 hours. South-to-North congestion at Malin totaled \$0 over 0 hours. Year-to-date North-to-South congestion is \$565,027 over 50 hours, and year-to-date South-to-North congestion remains at \$1,169,428 over 22 hours. Below are charts depicting Congestion Costs and Hours of Congestion at Malin from January 2021 through March 2025 in the North-to-South direction. Charts for the same Costs and Hours in the South-to-North direction depicting congestion from January 2022 through March 2025 are also included.







Transmission Agency of Northern California  
P.O. Box 15129 Sacramento, CA 95851-0129 (916) 852-1673

MEMORANDUM

DATE: May 14, 2025

TO: TANC Commission

FROM: John Roukema  
Interim General Manager

SUBJECT: REPORT ON TANC STRATEGIC PLANNING EFFORTS

This memorandum provides the Transmission Agency of Northern California (TANC) Commission with an update on activities associated with the TANC 2021-2025 Strategic Plan. The text below includes the update from the last TANC Commission meeting for each task that comprises the 2024-2025 work plan. Any progress since the last TANC Commission meeting is included in Table 1 in *italics text*. The current Gantt Chart is also provided in Figure 1.

**Table 1 - Progress on 2024-2025 Workplan, By Task as Shown in the Gantt Chart in Figure 1**

Task No.	<u>Task Name/Progress</u>
1	<p><b><u>Finance and Implement California-Oregon Transmission Project (COTP) Series Capacitor Project</u></b></p> <p>With new Federal regulations requiring review at the Department of Government Efficiency for all large federal contracts and investments, a slight delay in distribution of the Series Capacitor bid packet is envisioned. Western Area Power Administration (WAPA) staff have provided TANC with an updated schedule for the Series Capacitor project which is subject to change if federal procurement policies loosen.</p>
2	<p><b><u>Complete California-Oregon Intertie (COI) Path 66 Rating Process</u></b></p> <p>TANC has revised the necessary agreements to effectuate implementing the rerate on April 1, 2025, has updated the Open Access Same-time Information System templates and is in the process of updating its Available Transfer Capability Implementation Document. Bonneville Power Administration (BPA) is reporting that the Total Transfer Capability of the Northwest Alternating Current Intertie</p>

Task No.	<u>Task Name/Progress</u>
	<p>will not be available until late second or third quarter of 2025. So, although it is envisioned that the 5100 MW rating will be in effect as of April 1, 2025 in the North to South direction from the COI, the limiting factor of BPA's actions will likely mean that benefits of this increased rating will not be seen until later this calendar year.</p> <p><i>Task is complete.</i></p>
3	<p><b><u>Update Key TANC Agreements</u></b>                      The Balancing Authority of Northern California will prepare a draft operating agreement for TANC and Sacramento Municipal Utility District review later this year.</p>
4	<p><b><u>Prepare for and Complete 2024 Western Electricity Coordinating Council (WECC) Audit</u></b>                      Task is complete.</p>
5	<p><b><u>Continued Evaluation of Wildfire Risk Reduction Activities</u></b>                      Updates for the 2025 WMP include adding additional criterion that WAPA will consider when it is deciding whether to preemptively deenergize the COTP; updating the progress on and the Wildfire Strategies currently being evaluated for their long-term effectiveness in reducing COTP wildfire risks; and responding to Wildfire Safety Advisory Board recommendations.</p> <p><i>As a separate agenda item, the TANC Commission will consider approval of the 2025 TANC Wildfire Mitigation Plan for the COTP.</i></p>
6	<p><b><u>Consider Potential New Transmission Development</u></b>                      Staff continues to monitor the off-shore wind process. In addition, staff is participating in regional reviews of new transmission lines and/or updated transmission ratings. Finally, staff also continues to conduct transmission studies evaluating the impact of new generation or transmission either connecting to the COTP or to another system that could impact the COTP.</p>
7	<p><b><u>Explore Options to Increase the Value of the COTP</u></b>                      TANC continues to work with Open Access Technology International in the implementation of new pricing options and structures to offer its customers.</p>
8	<p><b><u>Explore Enhancements to South of Tesla Asset</u></b>                      TANC is working with certain Members in evaluating the option of using South of Tesla rights to use potential new solar energy with battery storage backup in the Path 15 area.</p>
9	<p><b><u>Develop and Adopt Enterprise Risk Plan</u></b>                      Staff is continuing to prepare information for the Enterprise Risk Plan on specifying risks events, the impact and probability of the specified risk events, and mitigation options (including existing controls).</p>
10	<p><b><u>Explore Impacts of Changing Markets on TANC and the COTP</u></b>                      Updated maps and memorandum are provided to the Interim General Manager as needed to keep information current. Staff is also undertaking an analysis of</p>

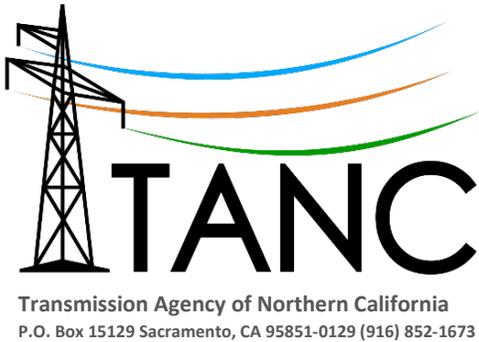
Task No.	<u>Task Name/Progress</u>
	proposed electric market changes, including the Extended Day-Ahead Market, and will present the information to applicable General Manager committees.
11	<p><b><u>Consider Revisions to TANC's Open Access Transmission Tariff (OATT)</u></b></p> <p>TANC continues its evaluation of revising its Large Generator Interconnection Procedures to accommodate FERC Order 2023 and 2023a (cluster study paradigm). Staff is aiming to present a revised Tariff to the TANC Commission in late Spring or Summer 2025, with a proposed date for opening an initial cluster process in early 2026.</p> <p><i>The General Manager's OATT Committee will consider a redline revision to the TANC OATT at their meeting in early June.</i></p>



**TAB 15**

**REPORT FROM THE TANC INTERIM GENERAL MANAGER**

The TANC Commission will receive a report from the TANC Interim General Manager



## MEMORANDUM

DATE: May 14, 2025

TO: TANC Commission

FROM: John Roukema  
Interim General Manager

SUBJECT: REPORT AND POTENTIAL ACTION ON THE ANNUAL MONITORING  
REPORT FOR PALM TRACT

---

The Thirtieth Annual Monitoring Report – Waterfowl Mitigation Plan Compliance for Palm Tract ‘B’ 2024 is enclosed for Transmission Agency of Northern California (TANC) Commission review. Waterfowl production goals consistent with the Waterfowl Mitigation Plan of 1992 have been fulfilled. Palm Tract ‘B’ continues to be managed in full compliance with the land use and management terms and conditions of the 1994 Conservation Easement with California Department of Fish and Wildlife and the Waterfowl Habitat Management Plan. Farming and waterfowl habitat management practices are well-developed and have a proven record of success on Palm Tract ‘B.’ Residual grain used as a food source by waterfowl totaled over 2 million pounds in 2024.

The condition of the levees, and therefore the flood protection at Palm Tract is excellent. This report also provides an update regarding TANC’s compliance with the Central Valley Regional Water Quality Control Board’s Irrigated Lands Regulatory Program. TANC continues to meet all reporting requirements, which are directed towards working with farmers to improve the implementation of best water quality management practices.

I recommend that the TANC Commission approve the Thirtieth Annual Monitoring Report – Waterfowl Mitigation Plan Compliance for Palm Tract ‘B.’

Enclosure

A Public Entity whose Members include:  
Alameda, Biggs, Gridley, Healdsburg, Lodi, Lompoc, Modesto Irrigation District,  
Palo Alto, Plumas-Sierra Rural Electric Cooperative, Redding, Roseville,  
Sacramento Municipal Utility District, Santa Clara, Turlock Irrigation District, Ukiah

**THIRTIETH ANNUAL MONITORING REPORT  
WATERFOWL MITIGATION PLAN COMPLIANCE  
FOR PALM TRACT 'B'  
2024**



**Prepared for the  
Transmission Agency of Northern California  
Unpublished Work © May 2025**

# TABLE OF CONTENTS

INTRODUCTION.....	1
2024 CROPPING PLAN .....	4
RESIDUAL GRAIN EVALUATION .....	4
POST-HARVEST FLOODING, SEASONAL WETLANDS, AND BROOD PONDS .....	7
RECREATIONAL HUNTING .....	9
MOSQUITO CONTROL ISSUES.....	9
TANC COMPLIANCE WITH THE IRRIGATED LANDS REGULATORY PROGRAM.....	9
SUMMARY .....	12
LITERATURE CITED.....	13
ACKNOWLEDGMENTS.....	13

## LIST OF FIGURES

FIGURE 1 – VICINITY AND SITE MAP.....	2
FIGURE 2 – PALM TRACT ‘B’ COTP-WATERFOWL HABITAT MITIGATION SITE .....	3
FIGURE 3 – 2024 PALM TRACT CROP PLAN.....	5
FIGURE 4 – 2024 PALM TRACT WHEAT RESIDUAL.....	6
FIGURE 5 – 2024 PALM TRACT WHEAT RESIDUAL.....	8
FIGURE 6 – SAN JOAQUIN COUNTY & DELTA WATER QUALITY COALITION BOUNDARIES .....	11

## LIST OF APPENDICES

APPENDIX A LETTER FROM CALIFORNIA DEPARTMENT OF FISH AND GAME CONFIRMING FULFILLMENT OF WATERFOWL PRODUCTION GOALS IN YEAR NINE	
APPENDIX B PALM TRACT MONITORING, WATERFOWL HUNTING INSPECTION REPORT AND TAKE COUNTS BY SPECIES 2023 TO 2024 HUNTING SEASON	

# THIRTIETH ANNUAL MONITORING REPORT, 2024

## WATERFOWL MITIGATION PLAN FOR PALM TRACT 'B'

### INTRODUCTION

#### *Background*

The construction of the California-Oregon Transmission Project (COTP) by the Transmission Agency of Northern California (TANC) resulted in a requirement to mitigate for potential impacts to waterfowl (Western Area Power Administration: "Western" 1992). The 1992 Western report determined that mitigation was required for the potential loss of approximately 145 ducks per year<sup>1</sup> resulting from collisions with the COTP transmission line.

Mitigation was also required for potential loss of habitat under and adjacent to the transmission line. To meet these requirements, TANC acquired mitigation land in 1993 on Palm Tract (Palm Tract 'B') in eastern Contra Costa County (Figure 1). In accordance with an April 1993 interagency agreement, the Palm Tract Waterfowl Habitat Management Plan (WHMP) was approved for the site. The WHMP identified "Type 1" mitigation areas that included waterfowl management units 1, 2, and 3 (i.e., brood ponds) and a seasonal wetland. Two annex pond wildlife enhancements totaling about 8 acres have since been added near the northeast corner of the seasonal wetland. The WHMP also identified "Type 2" mitigation areas comprised of areas to be farmed. Type 1 and Type 2 mitigation areas had separate, but similar land use restrictions consistent with WHMP mitigation goals (Figure 2). As part of the agreement, annual reports addressing the progress of the mitigation activities are to be made available to the California Department of Fish and Game (CDFG<sup>2</sup>) and the U.S. Fish and Wildlife Service (USFWS).

In 2002, the Palm Tract WHMP was in its final year of a nine-year monitoring program that began in 1993. Annual reports were required for the first five years of the project (1993-1998). The fifth annual report (TANC 1998) included a comprehensive evaluation of the progress of the mitigation and demonstrated that the five-year monitoring goals had been met. TANC received a letter from the CDFG on June 2, 1999, confirming that compliance with those five-year goals had been achieved. Monitoring continued from 2000 through 2003, including some waterfowl counts requested, but not required by CDFG.

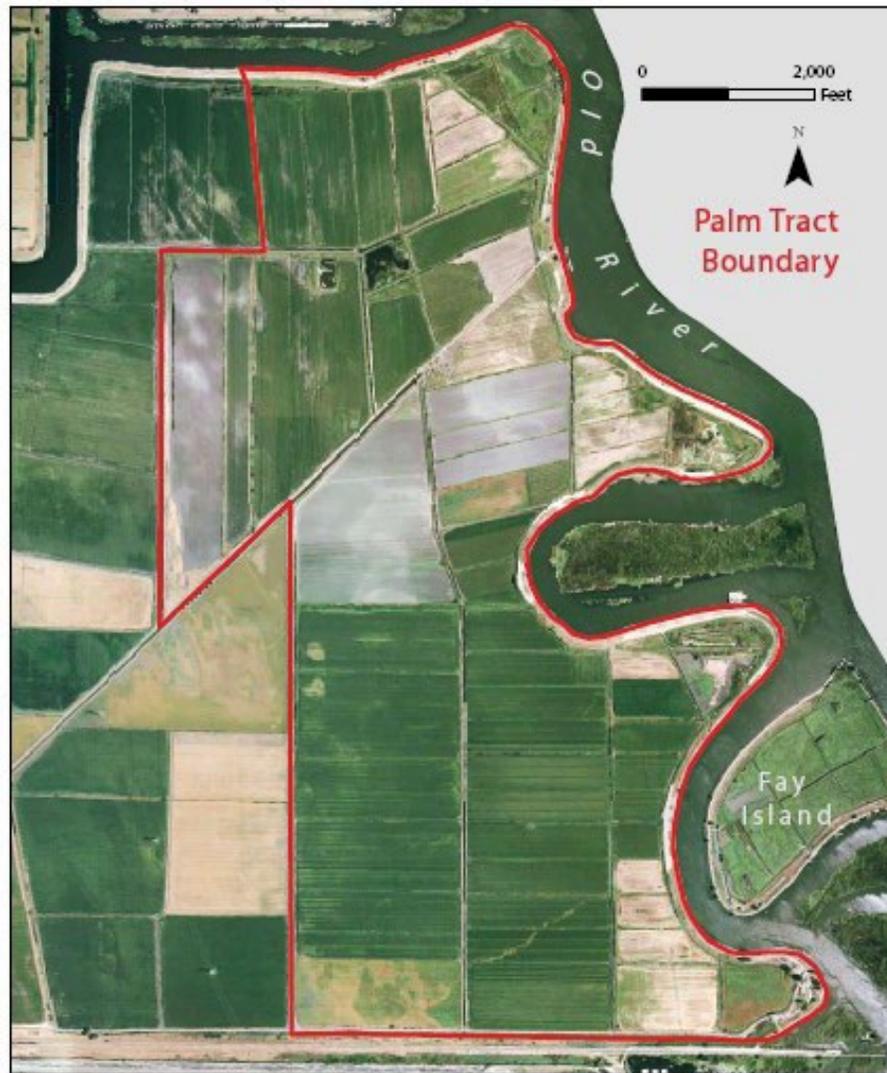
The ninth annual report was the final required waterfowl mitigation monitoring report issued by TANC. In a letter dated August 27, 2003, CDFG agreed that the site had met the waterfowl production goals in its ninth year (Appendix A). The WHMP was most recently updated in 2008 in collaboration with CDFG (TANC 2008).

---

<sup>1</sup> This criterion was adjusted in 1998 by the California Department of Fish and Game to 173 Class II and III ducklings.

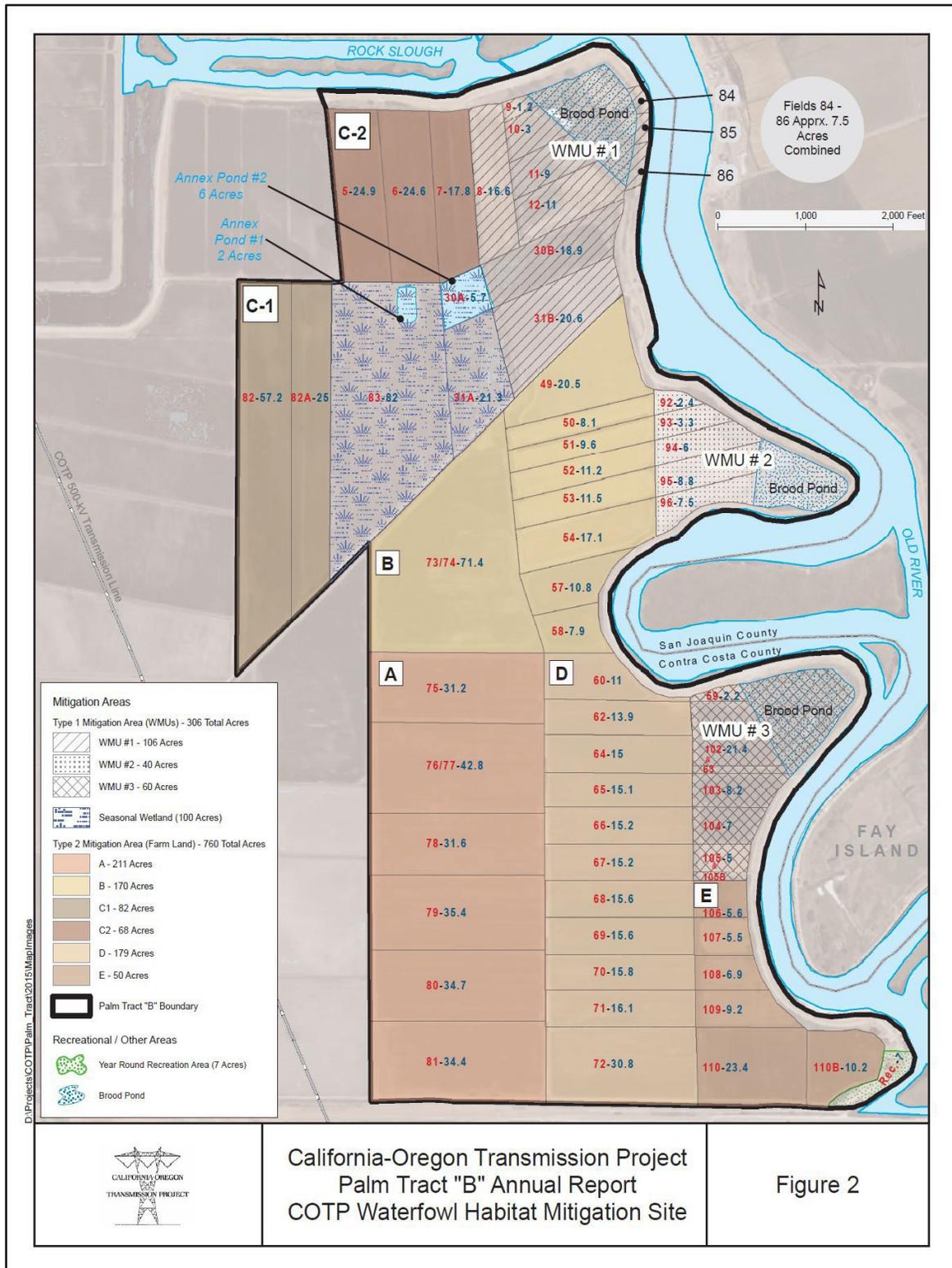
<sup>2</sup> The California Department of Fish and Game has been renamed the California Department of Fish & Wildlife.

FIGURE 1 – VICINITY AND SITE MAP



	<p>CALIFORNIA-OREGON TRANSMISSION PROJECT Palm Tract Annual Report Vicinity and Site Map</p>	<p>Figure 1</p>
---	--	-----------------

FIGURE 2 – PALM TRACT 'B' COTP-WATERFOWL HABITAT MITIGATION SITE



Although waterfowl production monitoring requirements have been fulfilled, TANC's project monitoring responsibilities continue with respect to land use, crop rotation, and associated ongoing compliance with the terms of the 1994 conservation easement between TANC and the CDFG. Those requirements are included in the WHMP, which serves as the guiding document for Palm Tract management compliance.

### ***Report Organization***

This thirtieth Annual Report covers 2024 activities on Palm Tract, and addresses several management issues, including compliance with land, water, and waterfowl management guidelines established in the WHMP. These include crop plans and residual grain evaluations, brood pond and seasonal wetland condition and maintenance, post-harvest flooding schedules, ditch maintenance, the annual hunting inspection, and other incidental issues relevant to compliance with the 1994 Conservation Agreement with the CDFG and WHMP. This report also discusses 2024 updates regarding TANC's compliance with the Central Valley Regional Water Quality Control Board's Irrigated Lands Regulatory Program.

### **2024 CROPPING PLAN**

The 2024 crops planted for Palm Tract are presented in Figure 3. Crops included corn (816 acres) and wheat (179 acres).

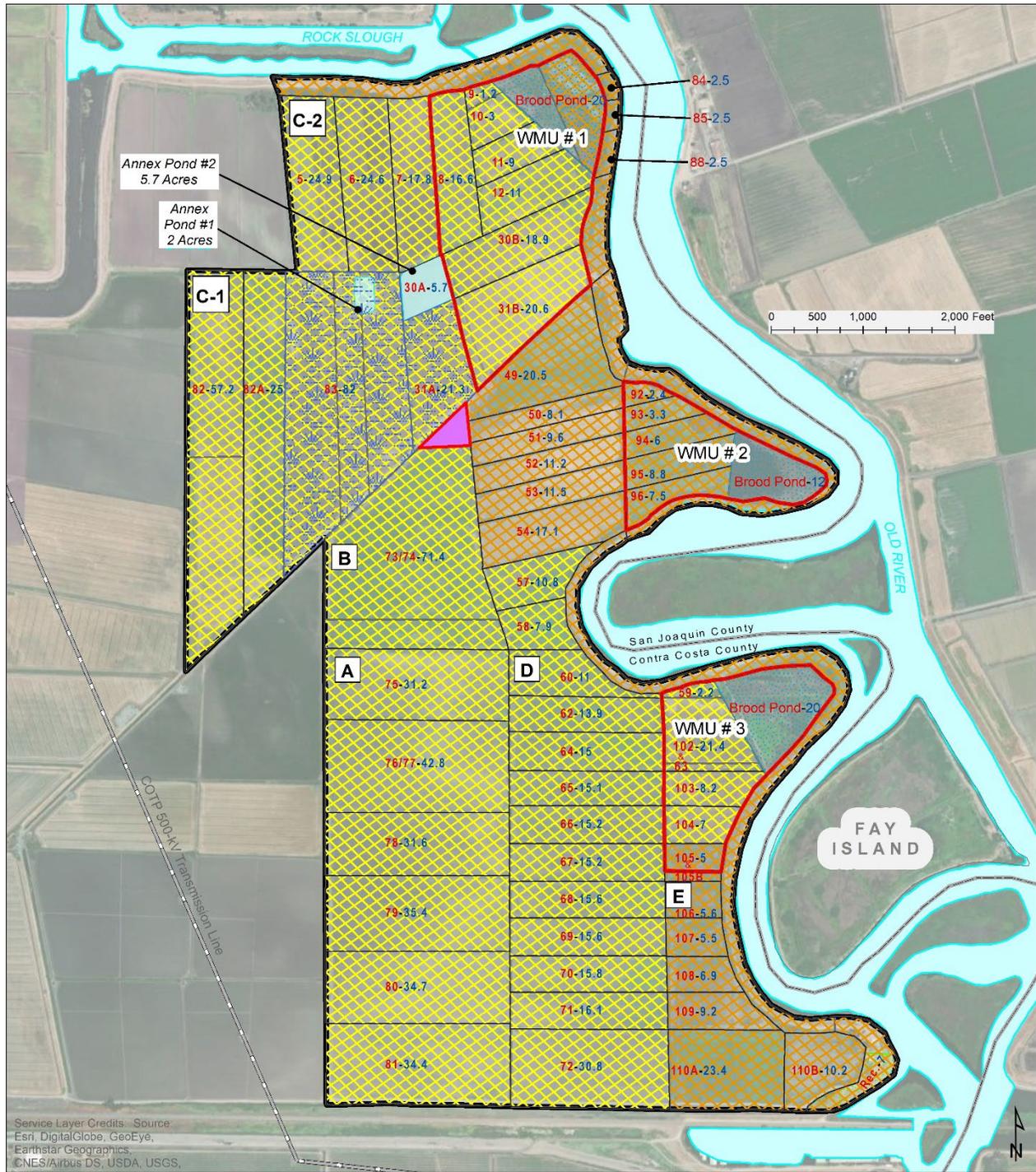
### **RESIDUAL GRAIN EVALUATION**

Use of residual crop resources by waterfowl continues to be very efficient. Most of it is quickly consumed soon after harvest. The residual wheat is usually consumed in less than two weeks. Residual corn resources are flooded in stages during the winter and therefore remain available longer as waterfowl food. The consumption of the residual corn is very efficient. Little residual corn remains by the time the ground is prepared for disking in spring. Because so little remains, no attempts have been made to quantify the remaining unconsumed residual grain.

### ***Residual Wheat 2024***

The wheat residual was informally standardized at a minimum of 60 acres during meetings between TANC, CDFG, and the tenant farmer in 2005. It was formally standardized at that same level in the 2008 update of the WHMP. The tenant farmer left a total of 53 acres of residual wheat in 2024 (Figure 4).

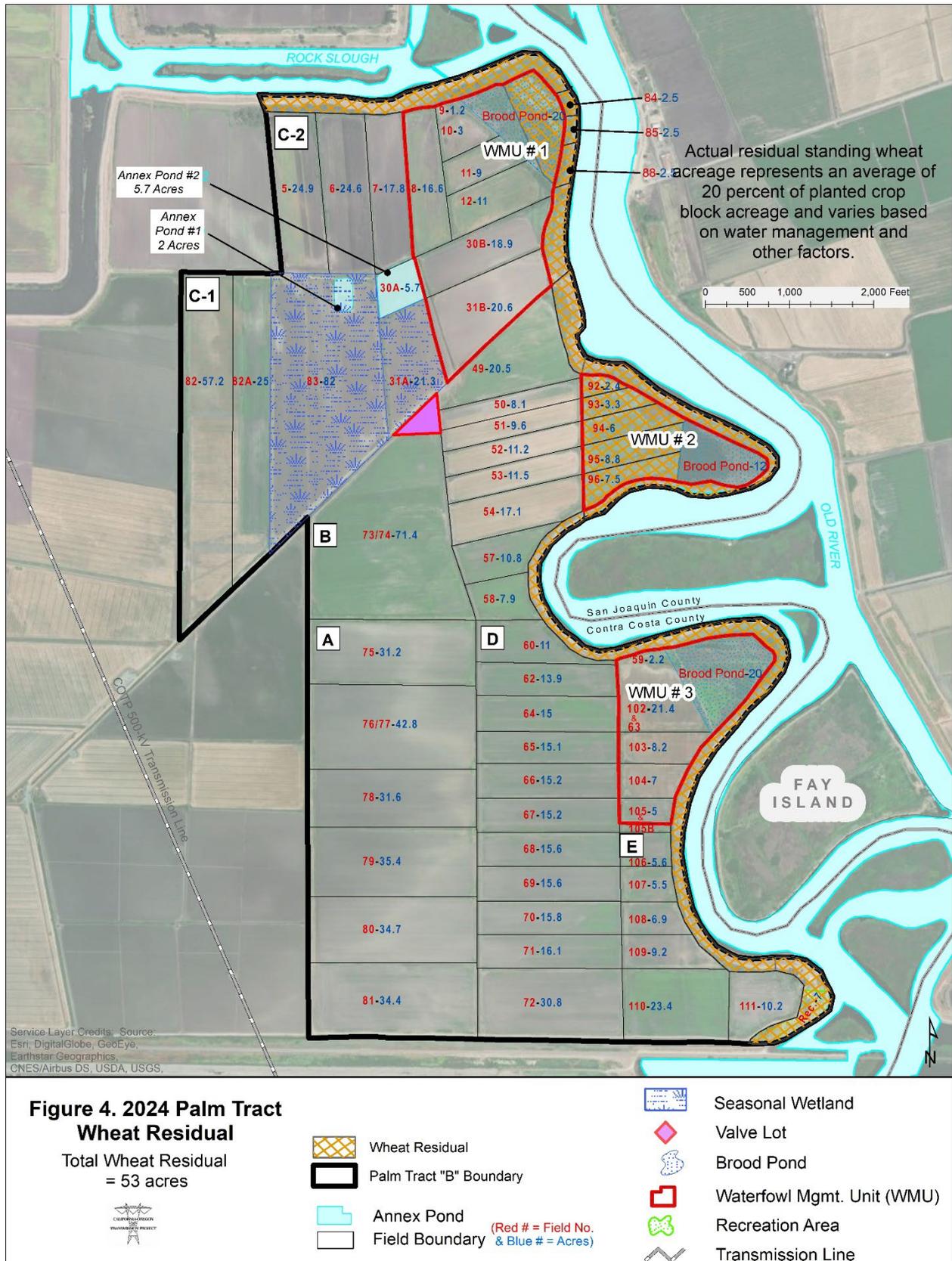
FIGURE 3 – 2024 PALM TRACT CROP PLAN



-  Corn (816 acres)
-  Wheat (179 acres)
-  Annex Pond
-  Field Boundary (Red # = Field No. & Blue # = Acres)

-  Seasonal Wetland
-  Valve Lot
-  Brood Pond
-  Waterfowl Mgmt. Unit (WMU)
-  Recreation Area
-  Transmission Line

**FIGURE 4 – 2024 PALM TRACT WHEAT RESIDUAL**



### *Residual Corn 2024*

The ongoing harvest pattern for residual corn is to cut 32 rows and leave eight rows standing. This method has been in use since 1999 and is well-suited to an efficient harvest. It also opens up the flooded corn for more use by the larger swans and geese. The residual corn was standardized at no less than 98 acres at the 1997 interagency meeting. The tenant farmer left 135 acres of residual corn in 2024, or 37 acres more than required residual corn resources (Figure 5). Table 1 summarizes the residual waterfowl food resources for 2024. These conservative estimates are based, in part, on values from Fredrickson and Taylor (1982).

<b>Table 1 Total Estimated Waterfowl Food Resources on the Palm Tract for 2024</b>	
<b>Food Source</b>	<b>Amount (pounds)</b>
Moist soil foods on 100 acres of seasonal wetland (1,800 lbs./acre) and 55 acres of brood ponds (2,000 lbs./acre)	290,000
Post-harvest flooding of 612 acres of corn (75 percent of 816 planted acres at 1,000 lbs./acre)	612,000
Corn residual at 135 acres (Average yield 8,000 lbs./acre)	1,080,000
Residual Wheat at 53 acres (Average yield 3,000 lbs./acre)	159,000
<b>Total</b>	<b>2,141,000</b>

### **POST-HARVEST FLOODING, SEASONAL WETLANDS, AND BROOD PONDS**

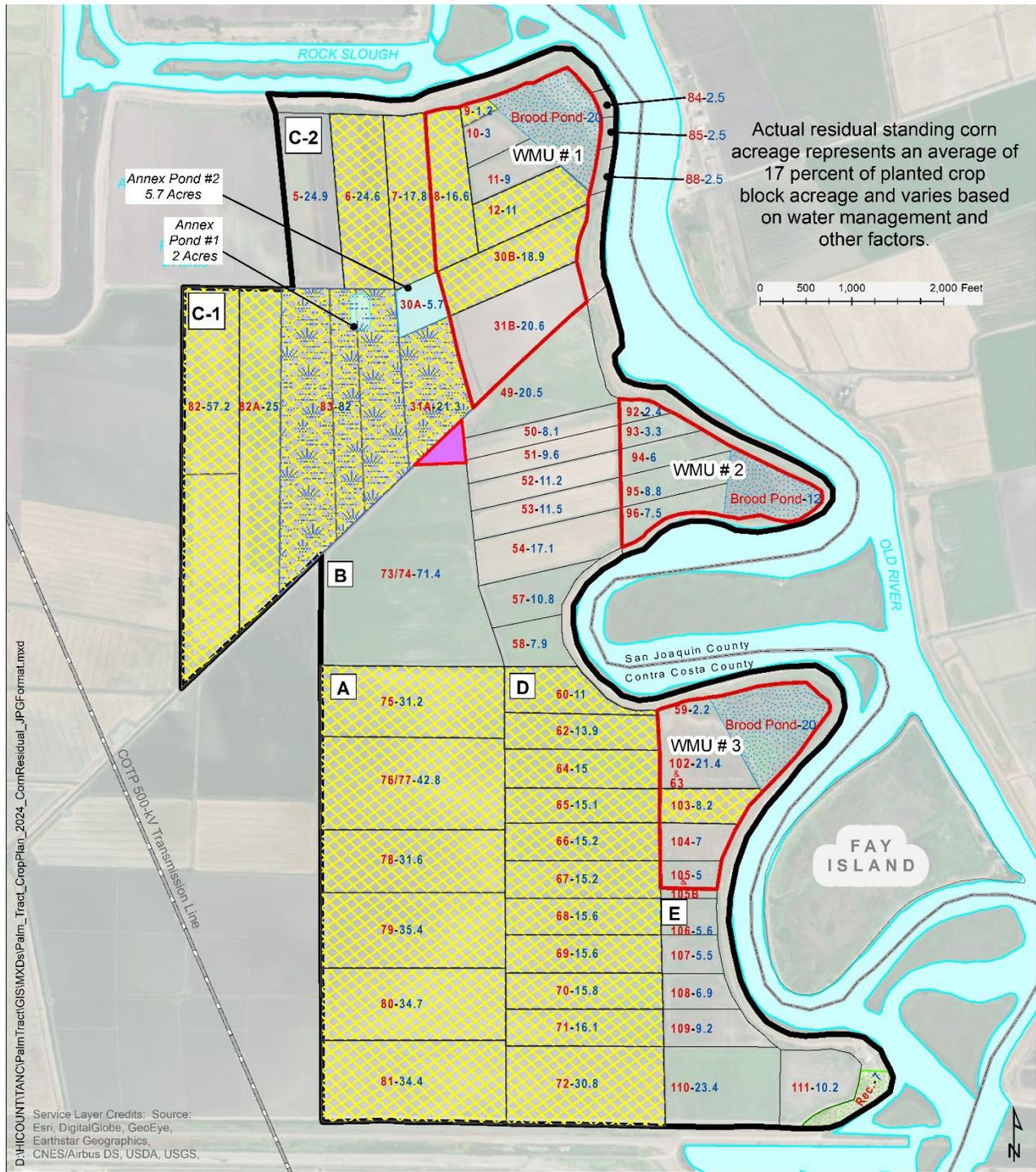
#### *Wheat*

Flooding of the residual wheat began during the third week of July. Early flooding of the wheat has been the normal practice since 1996 and works very well. Moving the water around the residual wheat fields on a 7 to 10-day flooding cycle has continued to keep mosquito problems to a minimum.

#### *Seasonal Wetland*

The seasonal wetland was completely drained and disked by the first week of May. The percentage of use of the seasonal wetland has stabilized at about 45 to 50 percent of the total use recorded on the Palm Tract. In late September, the seasonal wetland is drained annually to reduce decomposing vegetation and to help flood the harvested cornfields to the north.

**FIGURE 5 – 2024 PALM TRACT CORN RESIDUAL**



**Figure 5. 2024 Palm Tract Corn Residual**

Total Corn Residual = 135 acres



- Corn Residual
  - Palm Tract "B" Boundary
  - Annex Pond
  - Field Boundary
  - Seasonal Wetland
  - Valve Lot
  - Brood Pond
  - Waterfowl Mgmt. Unit (WMU)
  - Recreation Area
  - Transmission Line
- (Red # = Field No. & Blue # = Acres)

Water remains on the Annex Pond through July because it serves as attractive habitat for waterfowl broods. The seasonal wetland remains flooded until drawdown in March, with re-flooding by November 1. Re-flooding is done late in the fall to discourage mosquito breeding until temperatures are sufficiently low.

The post-harvest flooding of the corn crop was started in October and was drawn down the following January, prior to pre-crop soil preparation activities.

### ***Brood Ponds***

The brood ponds were all well-maintained throughout 2024. These ponds, ditches, and the main levee in the North Pond were disked under and burned off or cleaned out by the end of January. Two of the three ponds were flooded by the third week of February. Brood Pond drawdown occurred in August, and all three ponds were drawn down by mid-September. The ponds clearly require annual maintenance to maintain sufficient open-water habitat. In general, the ditches throughout Palm Tract are now in excellent condition and well-maintained. Water moves very well throughout the entire farm, allowing quick drainage and irrigation when and where they are needed.

## **RECREATIONAL HUNTING**

The hunting inspection report and take counts for the 2023-2024 hunting season are provided in Appendix B. Palm Tract 'B' is being managed in conformance with applicable hunting restrictions, and thousands of waterfowl are using the flooded exclusion area.

## **MOSQUITO CONTROL ISSUES**

The tenant farmer has an excellent relationship with the Contra Costa Mosquito and Vector Control District (CCMVCD). The CCMVCD is concerned with West Nile Virus, and exercises a high level of diligence in trying to prevent its spread. Mosquito and vector treatment visits and costs are minimal at Palm Tract 'B,' because the tenant farmer continues to employ proper water management practices that avoid standing water conditions while providing adequate habitat conditions for waterfowl production. The tenant farmer has continued to work cooperatively with the CCMVCD.

## **TANC COMPLIANCE WITH THE IRRIGATED LANDS REGULATORY PROGRAM**

This section provides an update TANC's compliance with the Irrigated Lands Regulatory Program (ILRP) directed towards improving best management practices for water quality in the Central Valley.

### ***Background and Introduction***

The Central Valley Regional Water Quality Control Board (CVRWQCB) has administered the Irrigated Lands Regulatory Program since 2005 under a series of General Waste Discharge Orders (General Orders) that are applicable to agricultural water discharges from irrigated lands. The Order serves as general waste discharge requirements for those discharges from irrigated lands (discharges) that could affect ground and/or surface waters

of the state. The discharges result from runoff or leaching of irrigation water and/or stormwater from irrigated lands. The most recent version of the General Order was last revised on October 2021<sup>3</sup>. TANC, as the owner of Palm Tract “B” qualifies as a “Discharger” according to CVRWQCB definitions and needs to comply with the conditions of the waiver.

The General Order applies to owners and operators of irrigated lands within the San Joaquin County and Delta Area. Either the owner or operator may enroll an irrigated lands parcel under this Order. The owners or operators that enroll irrigated lands parcels are considered members of a third-party representing all or a portion of this area (i.e., “Members”). The General Order therefore allows growers to either comply with its requirements as individuals, or to be represented by a third-party coalition that represents several grower Members.

Because of the benefits of joining a third-party coalition, TANC joined the San Joaquin County & Delta Water Quality Coalition (Coalition) in 2005 and maintains that membership. Annual dues for 2024 were \$7,284. Membership in the Coalition allows TANC to waive the requirement for a Report of Waste Discharge and to waive the need to obtain a Waste Discharge Requirement consistent with applicable provisions of the California Water Code.

The Coalition assists its Members in complying with the relevant terms and provisions of the General Order, including required monitoring and reporting across the entire Coalition’s boundaries. The Coalition oversees representative water quality sampling, reporting, and monitoring efforts required by the General Order and conditional waiver. However, individual Members of the third-party group continue to bear ultimate responsibility for complying with the General Order. General Order compliance requires both TANC, as an individual Member, and the Coalition to each meet their respective reporting requirements. Figure 6 shows the boundaries of the Coalition.

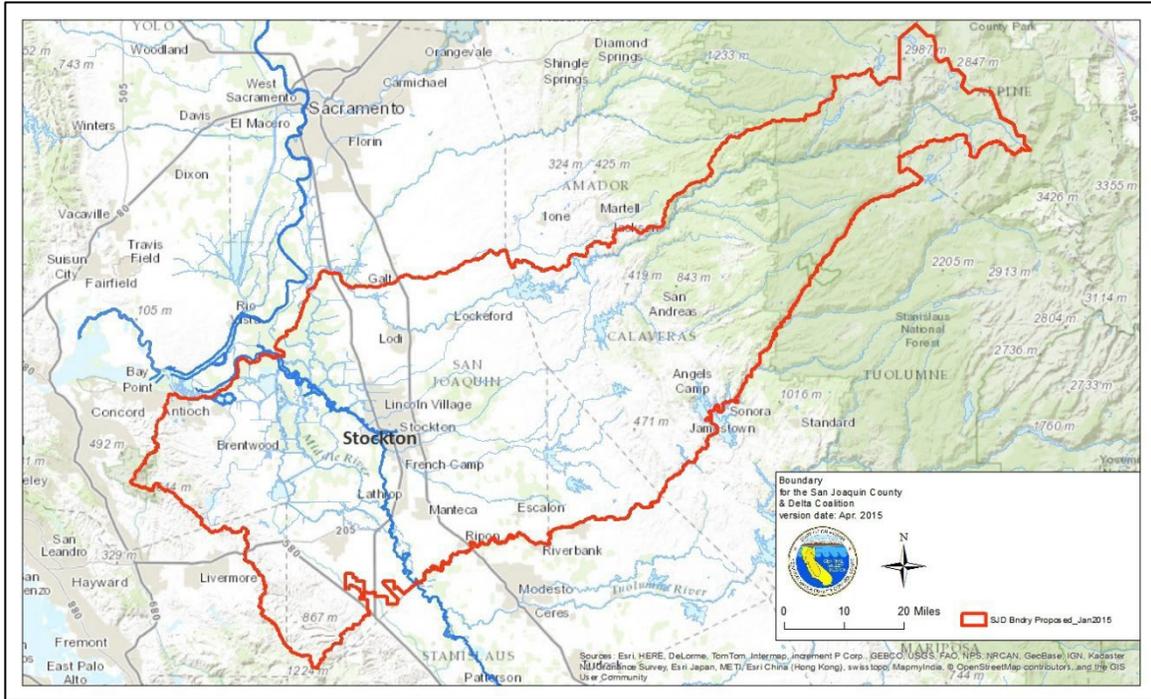
The Executive Officer of the CVRWQCB provides templates to the Coalition to distribute to its Members<sup>4</sup>. The templates must be used to comply with the requirements of this Order, where applicable. TANC’s Member reporting requirements are reviewed below, followed by the reporting obligations of the Coalition as the third-party representative of the Coalitions’ membership.

---

<sup>3</sup> California Regional Water Quality Control Board Central Valley Region Order R5-2014-0029-07 as amended per Revisions per Order R5—2021-0053; October 15, 2021.

<sup>4</sup> The purposes of the templates are to collect information consistently across irrigated agricultural areas and commodities, and to minimize the costs for growers to provide that information. Consistent information collection will facilitate analysis within a geographic area and across the Central Valley.

**FIGURE 6 – SAN JOAQUIN COUNTY & DELTA WATER QUALITY COALITION BOUNDARIES**



***Required Reports, Monitoring and Notices – TANC as an Individual Member***

The General Order prioritizes Member completion and updating of required plans and reports based on whether the irrigated lands are within a high or low groundwater vulnerability area. Palm Tract is formally designated as being within a low vulnerability area. There were two 2024 reporting requirements for TANC. These included the following:

- 2023 Irrigation and Nitrogen Management Plan (INMP) Summary Report; and
- 2024 INMP Worksheet.

Detailed reporting requirements for each of those submittals are summarized below.

*Irrigation and Nitrogen Management Plan Summary Report (INMP Summary Report):* The INMP Summary Report summarizes actual prior year information pertaining to:

- Crop acreages, and yields;
- Irrigation methods and efficiency practices; and
- Nitrogen applications and efficiency practices.

The INMP Summary Report was completed and submitted to the Coalition **by the required April 1, 2023 due date.**

*INMP Worksheet*: The INMP Worksheet projected planned and applied irrigation and nitrogen management practices for the 2024 farming year. It requires growers to plan their irrigation and nitrogen applications and management in direct relation to anticipated crops and yields. The planning considerations include several items that will also be included on the following years' INMP Summary Report (*italicized* below):

- Anticipated irrigation amounts by crop, *irrigation methods, irrigation efficiencies*, and estimated crop evapotranspiration;
- Irrigation water nitrogen concentration; planned nitrogen applications; *nitrogen efficiency practices, nitrogen concentration in the irrigation water, organic amendments, dry and liquid fertilizer applications, foliar fertilizer applications*, and actual nitrogen applied (post-harvest); and
- *Crops, harvested yields, and production unit (s)*.

The INMP Worksheet for Palm Tract was completed by **the required due date of June 15, 2023** and maintained at the Palm Tract headquarters; available upon request by the CVRWQCB. The data generated by the INMP worksheets and subsequent INMP Summary Reports allow the Coalition and CVRWCB to identify areas where nitrogen management needs improvement.

### ***Managed Wetlands***

Palm Tract 'B' includes brood ponds and a seasonal wetland that are managed for waterfowl habitat purposes. Some of these lands likely qualify as managed wetlands. Since fertilizers are not used on managed wetlands, and wetlands generally act as a sedimentation basin and do not contribute to excess sediment, the General Order does not require the preparation of NMPs and summary reports, or SECPs for parcels that are solely operated as managed wetlands.

### ***ILRP Summary***

Members are required to implement practices to meet the above performance standards, periodically review the effectiveness of implemented practices and make improvements where necessary. Members in both high and low vulnerability areas will identify the practices they are implementing to achieve water quality protection requirements as part of farm evaluation surveys and nitrogen management reporting. The General Order requires water quality monitoring and assessments aimed to identify trends, evaluate effectiveness of management practices, and detect exceedances of water quality objectives.

### **SUMMARY**

Palm Tract 'B' continues to be managed in full compliance with the land use and management terms and conditions of the 1994 Conservation Easement with CDFG, the most recent version of the WHMP, and the obligations and responsibilities created by the agreements, easements, and plans mentioned in this report. Farming, waterfowl habitat management, and all associated compliance and best management practices are well-developed and have a proven record of success on Palm Tract 'B.'

## LITERATURE CITED

- California State Water Resources Control Board. 2015. Order WR 2015-0002-DWR: Order for Additional Information in the Matter of Diversion of Water from the Sacramento and San Joaquin River Watersheds. February 2015.
- Fredrickson, L.H., and T.S. Taylor. 1982. Management of Seasonally Flooded Impoundments for Wildlife. U.S. Dept. Interior, Fish and Wildlife Service, Resource Publication 148. 29 pp.
- San Joaquin County and Delta Water Quality Coalition. 2008. Monitoring and Reporting Program Plan.
- TANC 1998. Transmission Agency of Northern California. Fifth Annual Mitigation Monitoring Report for Palm Tract 'B'-Contra Costa County. December 1998.
- TANC 2008. California-Oregon Transmission Project Waterfowl Habitat Management Plan – Palm Tract "B." July 2008.
- Western 1992. Western Area Power Administration. COTP Waterfowl Mitigation Plan. Unpublished report prepared for TANC. February 1992.

## ACKNOWLEDGMENTS

A number of people have contributed to the Palm Tract mitigation project over the past several years. TANC would like to thank all of these participants for their time and efforts in making this project a success:

- Ron Morris, Palm Tract Farms
- Brad Burkholder, California Department of Fish and Wildlife
- Don Wagenet, California-Oregon Transmission Project
- Alfred F. Jahns, former California-Oregon Transmission Project Counsel

## APPENDIX A

Letter from California Department of Fish and Game  
Confirming Fulfillment of Waterfowl Production Goals in Year Nine



State of California - The Resources Agency

**DEPARTMENT OF FISH AND GAME**

<http://www.dfg.ca.gov>  
Central Valley Bay-Delta Branch  
4001 North Wilson Way  
Stockton, California 95205-2486  
(209) 948-7800

GRAY DAVIS, Governor



August 27, 2003

Mr. Don Wagenet  
Transmission Agency of Northern California  
P.O. Box 15129  
Sacramento, California 95851-0129

RECEIVED

SEP 05 2003

NCI - Sacramento

Dear Mr. Wagenet:

This letter is a follow-up to the annual meeting on May 2, 2003 during which we discussed the progress and status of the mitigation efforts on Palm Tract. After reviewing the 2003 Annual Report and discussing the results of the project, we agree that the site has met the waterfowl production goals in this ninth year. Congratulations on the success of the project.

We would also like to take this opportunity to address the temporary modifications and amendments made to the Habitat Management Plan which will need to be addressed and evaluated next year. One such issue is the temporary modifications associated with the seasonal wetland management (vegetation, configuration, and water management). My staff is currently researching alternative strategies for the seasonal wetland and vector control issues. We look forward to working with the Contra Costa Mosquito and Vector Control District to develop collaborative approaches to maintain the ecological values and functions of the site while reducing the risk of nuisance mosquitoes. We will share that information with you as it is developed.

We look forward to working with you to ensure that the Palm Tract Mitigation Project continues to successfully meet TANC's mitigation obligations. If you have any questions, please feel free to contact Mr. Brad Burkholder of my staff at (209) 948-7800.

Sincerely,

Frank Wernette  
Environmental Program Manager

*Conserving California's Wildlife Since 1870*



## **APPENDIX B**

### **Palm Tract Monitoring, Waterfowl Hunting Inspection Report and Take Counts by Species 2023 to 2024 Season**

## MEMORANDUM

DATE: January 22, 2024

TO: Don Wagenet

FROM: Chuck Williams

SUBJECT: Palm Tract Monitoring, Waterfowl Inspection Report – 2023-2024

---

Consistent with the Waterfowl Habitat Management Plan and associated monitoring requirements, I inspected the waterfowl hunting blinds and their locations on Palm Tract on January 13, 2023. Under terms of the farming lease agreement and the Grant of Conservation Easement from the California Department of Fish and Game, the tenant farmer is subject to several requirements and restrictions concerning the maintenance of wildlife habitat and food supply, plus recreational bird hunting on the property, as listed below.

### PALM TACT HUNTING RESTRICTIONS

Hunting activity and the construction, operation and maintenance of related facilities are subject to the following restrictions, and one compliance inspection per year:

- 1) Hunting will be limited to the southern half of the site on approximately 500 acres in management cells A, D, E, and Waterfowl Management Unit (WMU) #3.
- 2) A shooting exclusion zone, 200 yards wide, will be located at the northern end of the open hunt area.
- 3) No hunting of any kind will be allowed in the exclusion zone.
- 4) Seven blinds will be allowed, spaced at least 200 yards apart and placed at least 200 yards from the southern end of the shooting exclusion zone.
- 5) Hunting will be limited to two shoot days per week, Saturdays and Sundays, and the opening day of dove season.
- 6) Shooting will be restricted to within a ten-foot radius of the blind except for retrieval of crippled waterfowl.
- 7) Membership will be limited to 14 adult members and six junior members (a maximum of 14 adult and six junior hunters per day).
- 8) Waterfowl and pheasant hunting will be allowed during their respective regular seasons. Dove hunting will be allowed during the first half of the dove season, which is typically during the first two weeks of September. Quail hunting will not be allowed.
- 9) Pheasant hunting will be allowed throughout the open hunting area and in WMU #3.
- 10) Retrieval of downed or crippled waterfowl and doves by dogs will be limited to the open hunting areas.

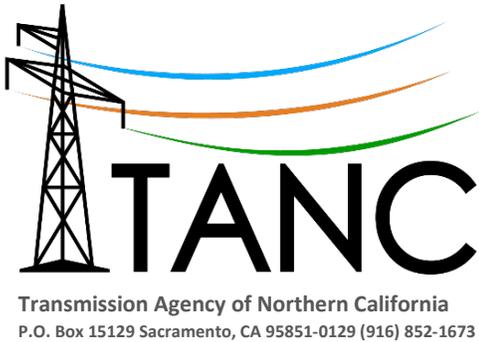
- 11) The construction, operation, and maintenance of any hunting related facilities shall be the responsibility of the tenant farmer. All proposed construction shall be in accordance with the conservation easement and will be subject to prior review and approval by TANC.
- 12) If Christmas Day falls on a weekend, an additional hunt day will be allowed on the first Wednesday following Christmas Day.
- 13) Snipe hunting will be allowed after the beginning of waterfowl season in Units A, D, and E, but will be restricted to within 100 feet of an established blind.
- 14) During pheasant season, Snipe can be hunted anywhere in Units A, D, E, and WMU #3.

### HUNTING INSPECTION RESULTS

On Saturday, January 13th, I visited the Palm Tract property and spent the morning hunting with the club manager and members, after which I toured the site with the manager. Conformance with the applicable sections of the foregoing restrictions was verified. There was still a substantial amount of the unharvested corn, which had not yet been eaten by waterfowl. There were a large number of ducks, geese, and swans throughout the entire property. All blinds harvested waterfowl with a few full limits of geese taken.

#### Palm Tract Waterfowl Hunting Report 2023-2024 Season

Species/ Date	9/1	10/21	11/4	11/11	11/18	11/25	12/2	12/9	12/16	12/23	12/30	1/6	1/13	1/20	1/27	Total
White-Fronted Goose			5	3	7	9	11	10	15	20	9	7	3	4	1	104
Snow Goose							5	6	9	3	2	5	4			34
Green-Winged Teal				4			3		4		3	2	1	2	3	22
Mallard		28	18	15	12	10	8	15	14	12	9	7	10	12	7	177
Northern Pintail				4	3	5	6	9	4	3	3	2	2	3	2	43
Cinnamon Teal																0
Northern Shoveler							4		1		3		2			10
Gadwall																0
American Widgeon		1		3	2			1		3			2	1	2	15
Mourning Dove	57															57
Ring-Necked Pheasant				3	2	3	1	1	1	1						12
Common Snipe																0
<b>Total</b>	<b>57</b>	<b>29</b>	<b>23</b>	<b>24</b>	<b>31</b>	<b>25</b>	<b>37</b>	<b>39</b>	<b>53</b>	<b>43</b>	<b>29</b>	<b>23</b>	<b>24</b>	<b>22</b>	<b>15</b>	<b>474</b>



## MEMORANDUM

DATE: May 14, 2025

TO: TANC Commission

FROM: John Roukema  
Interim General Manager

SUBJECT: RESOLUTION APPROVING THE 2025 TANC WILDFIRE MITIGATION PLAN FOR THE CALIFORNIA-OREGON TRANSMISSION PROJECT

---

California Public Utilities Code Section 8387 requires that wildfire mitigation plans (WMPs) prepared by publicly owned utilities and electrical cooperatives be submitted annually no later than July 1<sup>1</sup>. The Transmission Agency of Northern California (TANC) has worked collaboratively with the Western Area Power Administration (WAPA) to prepare the attached 2025 update to the TANC WMP for the California-Oregon Transmission Project (COTP) (TANC WMP). This version focuses on three major changes, including:

- Updating annual progress on the six currently active Wildfire Prevention, Mitigation, and Response Strategies (Wildfire Strategies) under review from 2023 through the end of 2025;
- Adding Appendix A, which explains how the TANC WMP is responsive to the 10 substantive recommendations in the California Wildfire Safety Advisory Board's (WSAB's) Advisory Opinion for the 2025 Wildfire Mitigation Plans of Publicly Owned Electric Utilities and Electrical Cooperatives (2025 Advisory Opinion); and,
- Adding Appendix B, which is a standalone table summarizing the entire set of TANC WMP Wildfire Strategies — as requested in the 2025 Advisory Opinion — that is intended to expedite future WSAB reviewers' ability to grasp how those strategies mutually complement one another to advance wildfire risk reduction for the COTP.

---

<sup>1</sup> Public Utilities Code Section 8387(b)(1)(1): "Each local publicly owned electric utility and electrical cooperative shall update its plan annually and submit the update to the California Wildfire Safety Advisory Board by July 1 of each year. At least once every three years, the submission shall be a comprehensive revision of the plan."

TANC Commission

May 14, 2025

Page Two

At their meeting on May 14, 2024, the COTP Engineering and Operations Committee recommended approval of the 2025 TANC WMP, to both the TANC Commission and COTP Management Committee.

Approval of the enclosed resolution will authorize the Interim General Manager to submit an email vote for approval of the 2025 TANC WMP to the COTP Management Committee.

Approval of the attached resolution will also authorize the filing of the 2025 TANC WMP, with the California Wildfire Safety Advisory Board before the July 1, 2025 deadline, subject to the approval of the COTP Management Committee.

Enclosure

RESOLUTION 2025-\_\_

A RESOLUTION OF THE  
TRANSMISSION AGENCY OF NORTHERN CALIFORNIA  
AUTHORIZING THE ACCEPTANCE OF THE 2025  
TRANSMISSION AGENCY OF NORTHERN CALIFORNIA WILDFIRE MITIGATION PLAN  
FOR THE CALIFORNIA-OREGON TRANSMISSION PROJECT

WHEREAS, the Transmission Agency of Northern California (TANC) is a joint exercise of powers agency organized under the laws of the State of California and is comprised of 15 publicly-owned utilities and irrigation districts located throughout northern and central California; and

WHEREAS, TANC is the largest Participant and the Project Manager of the California-Oregon Transmission Project (COTP); and

WHEREAS, the Western Area Power Administration (WAPA) serves as the Operation and Maintenance contractor for the COTP; and

WHEREAS, Senate Bill 901; (Statutes 2018; Ch. 79: SB 901) required publicly-owned electric utilities to prepare a Wildfire Mitigation Plan (WMP) by January 1, 2020; and Assembly Bill 1054 (Statutes 2019; Ch. 79: AB 1054) requires that publicly-owned electric utilities submit an annual update to their WMP to the California Wildfire Safety Advisory Board (WSAB) by July 1 each year as codified in California Public Utilities Code (PUC) Section 8387; and

WHEREAS, TANC worked with WAPA to develop the initial 2020 WMP which included a 30-day public comment period and a review by an Independent Evaluator (IE); and was approved by the TANC Commission in November 2019 and submitted to the WSAB prior to January 1, 2020; and

WHEREAS, TANC worked with WAPA and the COTP Wildfire Planning Committee to develop the 2021 annual update to the WMP which was approved by the TANC Commission in May 2021 and submitted to the WSAB prior to July 1, 2021; and

WHEREAS, TANC worked with WAPA and the COTP Wildfire Planning Committee to develop the 2022 annual update to the WMP which was approved by the TANC Commission in May 2022 and submitted to the WSAB prior to July 1, 2022; and

WHEREAS, TANC worked with WAPA to develop the 2023 comprehensive revision to the 2022 WMP as required every three years consistent with PUC Section 8387 and TANC also contracted with a third-party IE with experience in assessing the safe operation of electrical infrastructure to review and assess the comprehensiveness of the 2023 WMP in complying with all applicable requirements of PUC Section 8387 and which was approved by the TANC Commission in May 2023 and submitted to the WSAB prior to July 1, 2023; and

WHEREAS, TANC worked with WAPA to develop the 2024 annual update to the WMP which was approved by the TANC Commission in May 2024 and submitted to the WSAB prior to July 1, 2024; and

WHEREAS, TANC worked with WAPA to develop the 2025 annual update to the WMP; and

WHEREAS, at their meeting on May 14, 2024, the COTP Engineering and Operations Committee recommended that the TANC Commission approve the 2025 WMP for submittal to the WSAB prior to the July 1, 2025 deadline; and

NOW, THEREFORE, BE IT HEREBY RESOLVED by the Commission of the Transmission Agency of Northern California that the 2025 WMP is approved as final and further resolved that the

TANC Interim General Manager is authorized to submit an email vote for approval of the 2025 WMP to the COTP Management Committee.

BE IT FURTHER RESOLVED the TANC Interim General Manager is authorized to sign the transmittal letter for the WMP submittal to the California Wildfire Safety Advisory Board and to authorize filing of the 2025 WMP before the July 1, 2025 deadline, subject to the approval of the COTP Management Committee.

PASSED AND ADOPTED this 21<sup>st</sup> day of May 2025 on a motion by \_\_\_\_\_,  
and seconded by \_\_\_\_\_.

AYES

NOES

ABSTAIN

ABSENT

City of Alameda

City of Biggs

City of Gridley

City of Healdsburg

City of Lodi

City of Lompoc

Modesto Irrigation District

City of Palo Alto

Plumas-Sierra Rural Electric Cooperative

City of Redding

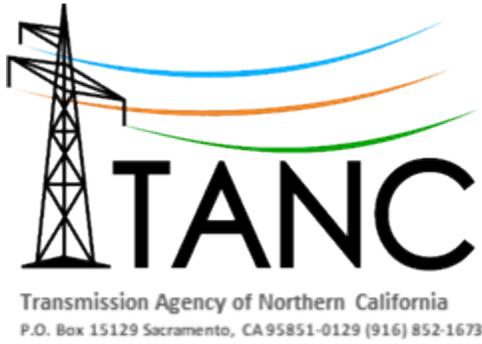
City of Roseville

Sacramento Municipal Utility District

City of Santa Clara

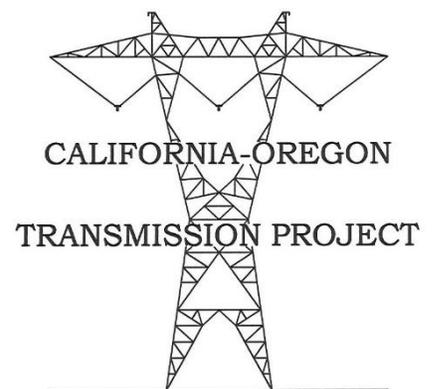
Turlock Irrigation District

City of Ukiah



**TRANSMISSION AGENCY OF  
NORTHERN CALIFORNIA**

**WILDFIRE MITIGATION PLAN  
FOR THE CALIFORNIA-OREGON  
TRANSMISSION PROJECT**



MAY 2025

## EXECUTIVE SUMMARY AND REVISION LOG

This is the 2025 Executive Summary and Revision Log for the Transmission Agency of Northern California (TANC) Wildfire Mitigation Plan (WMP or Plan) for the California-Oregon Transmission Project (COTP or Project). We understand that the California Wildfire Safety Advisory Board (WSAB) provides its most time- and cost-effective reviews, and therefore most informed advisory recommendations when WMP updates focus primarily on directing the reviewers on those significant changes (i.e., revisions) from the prior – or in this case – the 2024 version of this Plan.

The main body of this Plan has seven sections. Significant revisions to each of those seven sections include:

- **Section I** - Plan Overview and Objectives - No significant changes.
- **Section II** – Plan Context – No significant changes.
- **Section III** – Plan Implementation Roles and Responsibilities - No significant changes.
- **Section IV** – Wildfire Risk and Risk Drivers Associated with the COTP - No significant changes.
- **Section V** – Wildfire Prevention, Mitigation, and Response Strategies – We have updated each of the six currently active Enhanced Wildfire Prevention, Mitigation, and Response Strategies for their 2024 Progress and 2025 Approach in Tables V-1 through V-6.
- **Section VI** – Wildfire-Related Communications Protocols Regarding COTP Deenergization, Recloser Disabling and Service Restoration – We have added one new criterion that will be considered by the Western Area Power Administration (WAPA)—acting in its role as Operating Agent for the COTP – when it is considering whether to preemptively deenergize the COTP. That criterion – Line/Load Criticality Assessments – has been added as appropriate under imminent fire threat considerations.
- **Section VII** – Plan Evaluation and Metrics – No significant changes.

Other significant additions to this WMP include two new Appendices A and B, which were developed in response to the 2024 collaboration between the WSAB and the POU's. That collaboration culminated in the WSAB's adoption of the 'Advisory Opinion for the 2025 Wildfire Mitigation Plans of Publicly Owned Electrical Utilities and Electrical Cooperatives' (2025 Advisory Opinion). The 2025 Advisory Opinion included ten substantive recommendations for the development of the POU's 2025 WMP updates or future comprehensive WMPs. The new appendices in this Plan respond to those ten recommendations as follows:

- **Appendix A** – Approach and Responses to the 2025 Advisory Opinion – provides a detailed summary of our responses to each of those ten recommendations in this 2025 Plan update; and
- **Appendix B** – Summary of Projects and Programs – is a comprehensive, standalone table summarizing how TANC's entire set of reliability and wildfire risk reduction projects and programs complement one another. We hope this summary serves present and future WSAB reviewers of this Plan in understanding the TANC-COTP WMP when they are expediting their advisory roles and responsibilities.

TANC and WAPA have been collaborating on implementing COTP system reliability and wildfire risk reduction projects and programs since COTP energization in 1993. We hope this Plan reflects that depth of experience.

# TABLE OF CONTENTS

<b>I. PLAN OVERVIEW AND OBJECTIVES .....</b>	<b>1</b>
A. Policy Statement .....	1
B. Plan Purpose .....	1
C. Plan Objectives .....	1
i) Minimizing Sources of Wildfire Ignitions from the Project.....	2
ii) Minimizing Wildfire Spread Rates.....	2
iii) Maintaining the Resiliency of the Bulk Transmission Grid.....	2
iv) Progressively Applying the Most Effective Wildfire Prevention and Mitigation Strategies .....	2
v) Annually Improving Overall Plan Effectiveness .....	2
D. Plan Organization and Compliance with Public Resources Code Section 8387 .....	2
<b>II. PLAN CONTEXT.....</b>	<b>5</b>
A. Introduction .....	5
B. COTP Physical Assets.....	5
1. Project Transmission Line and Right of Way.....	5
2. Project Communication Sites.....	5
C. The California Public Utilities Code Fire Safety Regulations and HFTD.....	6
D. Changes to CPUC Fire Threat Map .....	8
E. Context-Setting Information Template, Prevailing Wind Speeds, and Average Weather Conditions .....	9
<b>III. PLAN IMPLEMENTATION ROLES AND RESPONSIBILITIES .....</b>	<b>13</b>
A. TANC and COTP Governance, Organization, and Management Responsibilities .....	13
B. WAPA Organization and Implementation Responsibilities .....	13
C. TANC Responsibilities for Compliance with All Applicable Laws, Orders, and Regulations .....	16
<b>IV. WILDFIRE RISK AND RISK DRIVERS ASSOCIATED WITH THE COTP.....</b>	<b>17</b>
A. Introduction .....	17
B. Risk Assessment Methodology .....	17
1. Reliability Centered Maintenance .....	17
2. WAPA Transmission Line Software Business Rule and Maintenance Priorities.....	17
3. Maintenance Structures .....	18
4. Vegetation Conditions .....	18
5. Right of Way Conditions .....	19
C. 2022 Maintenance Software Update .....	19
D. Wildfire Risks and Risk Drivers.....	19
1. Equipment, Structure, and Facility Failures .....	19
2. Topographic and Climatological Risk Factors.....	20
3. Object-to-Equipment Contacts.....	21
4. Wire to Wire Contacts.....	21
5. Wildfire Risk Event .....	21
6. Wildfire Consequences .....	21
7. Wildfire Risks, Risk Drivers, and Potential Consequences Bowtie Framework.....	22
<b>V. WILDFIRE PREVENTION, MITIGATION, AND RESPONSE STRATEGIES.....</b>	<b>24</b>
A. Introduction .....	24
B. Enhanced Wildfire Prevention, Mitigation, and Response Strategies .....	24
C. TANC’s Established Wildfire Prevention, Mitigation, and Response Strategies.....	40
<b>VI. WILDFIRE-RELATED COMMUNICATIONS PROTOCOLS REGARDING COTP     DEENERGIZATION, RECLOSER DISABLING AND SERVICE RESTORATION.....</b>	<b>47</b>

A.	Introduction .....	47
B.	Protocols for Disabling Reclosers Under Imminent Fire and/or Smoke Threat Conditions.....	47
C.	Protocols for Disabling Reclosers Pre-emptively Based on High Fire Threat Weather Activity .....	47
D.	Protocols for Deenergization Under Imminent Fire and/or Smoke Threat Conditions .....	48
E.	Protocols for Pre-emptive Deenergization Based on High Fire Threat Weather Activity .....	48
F.	Public Safety Communications Responsibilities.....	49
<b>VII.</b>	<b>PLAN EVALUATION AND METRICS .....</b>	<b>50</b>
A.	Monitoring and Auditing Transmission Line and Equipment Inspections Effectiveness .....	50
i)	Adding One Dedicated Maintenance Patrolman: .....	51
ii)	Multi-Year Infrared and Corona Inspection Contracts with Oblique Photography and High- Definition Video .....	51
iii)	Acquisition of Aerial Mounted Infrared, Oblique Photography, High-definition Video and/or Corona Camera Inspection Equipment.....	51
iv)	Detailed Aerial, Climbing and/or Ground-based Tower and Equipment Inspections in HFTD Tiers 2 and 3.....	51
v)	Drone (UAV) Inspection Program.....	52
vi)	Oblique Photography and High-Definition Video .....	52
B.	Metrics for Evaluating Plan Performance.....	53
C.	Monitoring and Auditing of Plan Implementation .....	53
D.	Independent Evaluation and Agency Presentation and Comments.....	63
1.	Independent Evaluation .....	63
2.	Agency Presentation and Comments .....	63

## List of Figures

Figure II-1.	COTP Overview .....	7
Figure II-2.	COTP High Fire Threat Districts.....	8
Figure II-3.	Context-Setting Information Template.....	9
Figure III-1.	TANC Organization Chart .....	15
Figure IV-1.	TANC Wildfire Risk Assessment Methodology.....	17
Figure IV-2.	TANC Bowtie Wildfire Risk Assessment Summary Diagram .....	22
Figure IV-3.	TANC Enterprise Risk Categories.....	22
Figure IV-4.	Prioritized List of TANC-COTP Wildfire Risks.....	23
Figure V-1.	Wildfire Strategy 16 - Additional Utility Forester .....	26
Figure V-2.	Wildfire Strategy 17 - COTP ROW Visual Coverage for Wildfire Detection.....	27
Figure V-3.	Wildfire Strategy 18 - COTP ROW Fuels Accumulations & Fuel Breaks Assessment .....	31
Figure V-4.	Wildfire Strategy 19 - Expanded Collaboration with State & Local Agencies.....	37
Figure V-5.	Wildfire Strategy 20 - COTP Tier 3 & Tier 2 Access Road Maintenance & Brushing .....	38
Figure V-6.	Wildfire Strategy 21 - Microwave Sites Defensible Space .....	39

## List of Tables

Table I-1.	Public Utilities Code Section 8387 Compliance Requirements and Corresponding Plan Sections and Pages .....	3
Table II-1.	Prevailing Wind Direction for Selected Locations Along the COTP ROW .....	11
Table II-2.	Prevailing Wind Speeds for Selected Locations Along the COTP ROW .....	11
Table III-1.	TANC-COTP Plan Roles and Responsibilities .....	16
Table VII-1.	Metrics for Evaluating the TANC-COTP WMP.....	54
Table VII-2.	2020-2022 Evaluation of Wildfire Prevention, Mitigation, and Response Strategies 1-15 for Plan Effectiveness .....	58
Table VII-2	2020-2022 Evaluation of Wildfire Prevention, Mitigation, and Response Strategies 1-15 for Plan Effectiveness .....	59
Table VII-2.	2020-2022 Evaluation of Wildfire Prevention, Mitigation, and Response Strategies 1-15 for Plan Effectiveness.....	60
Table VII-2.	2020-2022 Evaluation of Wildfire Prevention, Mitigation, and Response Strategies 1-15 for Plan Effectiveness.....	61
Table VII-2.	2020-2022 Evaluation of Wildfire Prevention, Mitigation, and Response Strategies 1-15 for Plan Effectiveness .....	62

## List of Appendices

Appendix A.	Approach and Responses to the 2025 Guidance Advisory Opinion.....	64
Appendix B	Summary of Projects and Programs .....	68

## LIST OF ACRONYMS

ASOS	Automated surface observation stations
BANC	Balancing Authority of Northern California
BES	Bulk electric system
CA	California Air Resources Act
CAISO	California Independent System Operator
CAL FIRE	California Department of Forestry and Fire Protection
CAPTAIN JACK	A substation location
CEATI	Centre for Energy Advancement through Technological Innovation
COI	California-Oregon Intertie
COTP	California-Oregon Transmission Project
CPUC	California Public Utilities Commission
E&O	Engineering and Operations
EPRI	Electric Power Research Institute
FRAP	Fire and Resource Assessment Program
GIS	Geographic information system
GO	General Order
GPS	Global Positioning System
GRIP	Guides, Requirements, Instructions, and Procedures
HFTD	High Fire Threat District
IE	Independent evaluation
IQGeo	Geospatial productivity and collaboration software
IR	Infrared
LiDAR	Light Detection and Ranging
LOR	Laws, orders, and regulations

## LIST OF ACRONYMS

MPR	Maintenance priority rating
MW	Megawatts
NEPA	National Environmental Policy Act
NERC	North American Electric Reliability Corporation
NHPA	National Historic Preservation Act
O&M	Operations and Maintenance
PG&E	Pacific Gas and Electric
PM	Preventive Maintenance
POU	Publicly owned utilities
POMA	Project Operation and Maintenance Agreement
PUC	Public Utilities Code
RCM	Reliability-centered maintenance
ROW	Right of way
RPF	Registered Professional Forester
SMUD	Sacramento Municipal Utility District
SNR	Sierra Nevada Region
STNF	Shasta-Trinity National Forest
TANC	Transmission Agency of Northern California
TMIP	Transmission Maintenance Inspection Program
TWOMA	TANC-Western Operation and Maintenance Agreement
UAV	Unmanned Aerial Vehicle
USFS	United States Forest Service
VTP	Vegetation Treatment Program
WAPA	Western Area Power Administration
WECC	Western Electricity Coordinating Council
WMP	Wildfire Mitigation Plan
WSAB	Wildfire Safety Advisory Board

## **I. PLAN OVERVIEW AND OBJECTIVES**

### **A. Policy Statement**

The Transmission Agency of Northern California (TANC or Agency) is a joint powers agency comprised of 15 publicly owned utilities (POUs) and irrigation districts (Members) located throughout northern and central California. TANC's mission is to assist its publicly owned utility Members in providing cost-effective energy supplies to their customers, through long-term ownership or contracts for service over its high-voltage transmission line within California and the western United States.

To support this mission, TANC constructed, maintains, and operates the California-Oregon Transmission Project (COTP or Project), a 340-mile 500 kilovolt (kV) transmission line and related facilities that extend from the California-Oregon border to central California. The COTP is the newest component of the 500 kV California – Oregon Intertie (COI), a critically important electrical transfer path between California and the Pacific Northwest. As a component of the COI, the COTP plays a key role in fulfilling the energy and reliability needs of California and the Pacific Northwest. The COTP provides an additional 1,600 megawatts (MW) of power exchange capability between California and the Pacific Northwest. It also provides a third transmission path between the two regions, thus significantly reducing the chances and effects of major power outages across the electric grid. Because of its importance to the electric grid, the COTP has always been operated and maintained to ensure its full availability and reliability.

TANC contracts with the Western Area Power Administration (WAPA) to provide operations and maintenance services for the COTP. As the primary owner and Project Manager for the COTP, TANC manages the Project in a safe and reliable manner that minimizes the risk of catastrophic wildfire that its electrical lines, substations, communication sites, compensation station and related equipment may pose. Other COTP Participants include WAPA and the Pacific Gas and Electric Company (PG&E).

### **B. Plan Purpose**

The purpose of this Wildfire Mitigation Plan (WMP or Plan) is to document the practices, procedures, processes and communications required, with the goal of minimizing the probability that TANC infrastructure might be the original or contributing source of a wildfire. It is subject to direct oversight by the TANC Commission and COTP Management Committee and is implemented by TANC, as the primary owner and Project Manager for the COTP. This Plan also complies with the requirements of Public Utilities Code (PUC) Section 8387 for publicly owned electric utilities to prepare a WMP by January 1, 2020, and annually thereafter followed by its submittal to the California Wildfire Safety Advisory Board (WSAB).

### **C. Plan Objectives**

TANC's objectives for minimizing the threat of catastrophic wildfire attributed to its facilities and complying with applicable laws and regulations include the following:

1. Minimizing Sources of Wildfire Ignitions from the Project;
  2. Minimizing Wildfire Spread Rates;
  3. Maintaining the Resiliency of the Bulk Transmission Grid;
  4. Progressively Applying the Most Effective Wildfire Prevention and Mitigation Strategies;
- and

5. Annually Improving Overall Plan Effectiveness. Each of these objectives is described below.

Each of these objectives is described below.

**i) Minimizing Sources of Wildfire Ignitions from the Project**

Effective implementation of this Plan has the primary objective of minimizing the probability that the design, operations, maintenance, and related activities and best practices conducted in support of the safe and reliable operation and maintenance of the COTP may be the origin of or a contributing cause of the ignition of a wildfire.

**ii) Minimizing Wildfire Spread Rates**

This objective seeks to proactively implement fire prevention and mitigation strategies and activities that minimize the spread of wildfires near the COTP that could become catastrophic if they spread rapidly and damage lives, property, and natural resources.

**iii) Maintaining the Resiliency of the Bulk Transmission Grid**

This objective seeks to establish and maintain consensus and communications among bulk transmission grid operators regarding: 1) whether the COTP would be deenergized in response to an existing wildfire threat, and if so; 2) the communications and operational protocols that could be implemented to maintain grid resiliency.

**iv) Progressively Applying the Most Effective Wildfire Prevention and Mitigation Strategies**

This objective is intended to progressively apply the most effective wildfire prevention and mitigation strategies. These strategies may include but are not limited to expanding effective on-the-ground maintenance, vegetation management and fuels inspections, potential risk and equipment failure detection technologies, aerial inspection methods and adding technology to improve situational awareness.

**v) Annually Improving Overall Plan Effectiveness**

This objective sets forth an annual review process for this Plan. It is intended to evaluate and improve the Plan's effectiveness in serving the compliance requirements and wildfire risk reduction needs and obligations of the TANC Members and COTP Participants.

**D. Plan Organization and Compliance with Public Resources Code Section 8387**

The implementation activities and compliance requirements are organized in the following sections:

- I. Plan Overview and Objectives;*
  - II. Plan Context;*
  - III. Plan Implementation Roles and Responsibilities;*
  - IV. Wildfire Risks and Risk Drivers Associated with the COTP;*
  - V. Wildfire Prevention, Mitigation, and Response Strategies;*
  - VI. Wildfire-Related Communications Protocols Regarding COTP Deenergization, Recloser Disabling, and Service Restoration; and*
  - VII. Plan Evaluation and Metrics.*
- Appendix A*  
*Appendix B*

This Plan was developed in 2019 and updated in 2020, 2021, and 2022. It was comprehensively revised in 2023. This updated Plan complies fully with applicable sections of California PUC Section 8387, including the requirement that each POU comprehensively revise its WMP at least once every three years. Table I-1 indicates applicable requirements and the corresponding Section of this Plan that addresses each applicable Section 8387 requirement.

<b>Table I-1. Public Utilities Code Section 8387 Compliance Requirements and Corresponding Plan Sections and Pages</b>	<b>Plan Section &amp; Page</b>
PUC § 8387. (a) Each local publicly owned electric utility and electrical cooperative shall construct, maintain, and operate its electrical lines and equipment in a manner that will minimize the risk of wildfire posed by those electrical lines and equipment.	All
(b) (1) (1) The local publicly owned electric utility or electrical cooperative shall, before January 1, 2020, prepare a WMP. After January 1, 2020, a local publicly owned electric utility or electrical cooperative shall prepare a WMP annually and shall submit the plan to the California WSAB on or before July 1 of that calendar year. Each local publicly owned electric utility and electrical cooperative shall update its plan annually and submit the update to the California WSAB by July 1 of each year. At least once every three years, the submission shall be a comprehensive revision of the plan.	Entire Plan
(2) The WMP shall consider as necessary, at minimum, all of the following:	See Below
PUC § 8387 (b)(2) (A) An accounting of the responsibilities of persons responsible for executing the plan.	III, 16
PUC § 8387 (b)(2) (B) The objectives of the WMP.	I, 2
PUC § 8387 (b)(2) (C) A description of the preventative strategies and programs to be adopted by the local publicly owned electric utility or electrical cooperative to minimize the risk of its electrical lines and equipment causing catastrophic wildfires, including consideration of dynamic climate change risks.	Entire Section V
PUC § 8387 (b)(2) (D) A description of the metrics the local publicly owned electric utility or electrical cooperative plans to use to evaluate the WMP's performance and the assumptions that underlie the use of those metrics.	VII, 53-62
PUC § 8387 (b)(2) (E) A discussion of how the application of previously identified metrics to previous WMP performances has informed the WMP.	VII, 53
PUC § 8387 (b)(2)( F) Protocols for disabling reclosers and deenergizing portions of the electrical distribution system that consider the associated impacts on public safety, as well as protocols related to mitigating the public safety impacts of those protocols, including impacts on critical first responders and on health and communication infrastructure.	VI, 47-49

<b>Table I-1. Public Utilities Code Section 8387 Compliance Requirements and Corresponding Plan Sections and Pages</b>	<b>Plan Section &amp; Page</b>
<b>PUC § 8387 (b)(2) (G)</b> Appropriate and feasible <b>procedures for notifying a customer</b> who may be impacted by the deenergizing of electrical lines. The procedures shall consider the need to notify, as a priority, critical first responders, health care facilities, and operators of telecommunications infrastructure.	VI, 49
<b>PUC § 8387 (b)(2) (H)</b> Plans for vegetation management.	V, 42-45
<b>PUC § 8387 (b)(2) (I)</b> <b>Plans for inspections</b> of the local publicly owned electric utility's or electrical cooperative's electrical infrastructure.	V, 40-42

## **II. PLAN CONTEXT**

### **A. Introduction**

California PUC Section 8387 requires in part that “Each local publicly owned electric utility and electrical cooperative shall construct, maintain, and operate its electrical lines and equipment in a manner that will minimize the risk of wildfire posed by those electrical lines and equipment.”

This Section establishes the context of this Plan for complying with Section 8387. The context focuses on the location and structural characteristics of the COTP physical assets. The Project assets include a single 500kV transmission line, three substations, one compensation station, and ten supporting microwave communication sites. This Section also frames the regulatory context that has been established by the California Public Utilities Commission (CPUC) High Fire Threat Districts (HFTDs) and their importance for prioritizing Plan implementation activities associated with these physical assets.

### **B. COTP Physical Assets**

#### **1. Project Transmission Line and Right of Way**

TANC’s transmission assets represent its ownership in the COTP, which consists of a 340-mile, 500kV high-voltage transmission line extending from the California-Oregon border<sup>1</sup> to the Tracy Substation in central California. The COTP also includes a substation in Olinda, California, and a voltage compensation station near Maxwell, California. The COTP began operation in March 1993, represents a portion of the bulk electric system (BES<sup>2</sup>) in northern California, and provides 1,600 MW of scheduled transmission capacity between California and the Pacific Northwest. Plan implementation and development are framed by the physical extent of the Project and supporting resources as noted below:

- The COTP consists of only one 500kV right of way (ROW);
- There are no additional transmission facilities within the COTP ROW;
- The COTP includes no distribution facilities;
- All Project transmission and microwave towers are comprised of steel;
- All switching (i.e. reclosing) equipment is located within the COTP substations; and
- The substations and compensation station are surrounded by managed agricultural land uses with low-growing vegetation.

This Plan applies to all COTP facilities, including the transmission towers, conductors, right of way, substations, compensation station, communication sites, and all associated equipment. TANC does not own any transmission facilities below 500kV, or any distribution level facilities that serve retail customers. The COTP was designed and is maintained to always be in full compliance with applicable CPUC General Order (GO) 95 Rules for Overhead Electric Line Construction.

#### **2. Project Communication Sites**

There are ten remote microwave communication sites that support COTP operations (Figure II-1). These sites range in size from one to two acres, and include microwave and other communication

---

<sup>1</sup> The COTP originates at the Captain Jack Substation in southern Oregon. The first six miles of the line – from the Captain Jack Substation to the California border - is managed by the Bonneville Power Administration.

<sup>2</sup> The definition of the bulk electric system (BES) can be found at: 2014. North American Electric Reliability Corporation. Bulk Electric System Definition Reference Document. Version 2, April 2014.

systems, towers, equipment shelters, power systems, antenna and antenna support systems and cables and all necessary and proper foundations, footings, crossarms, guys, anchors, radios and associated equipment, appliances and fixtures. The COTP communications sites' power supplies are delivered by local distribution level power service providers.

### **C. The California Public Utilities Code Fire Safety Regulations and HFTD**

The CPUC adopted the boundaries of a new HFTD in 2017.<sup>3</sup> The boundary of the HFTD is based on two maps, which are:

- The United States Forest Service (“USFS”) and California Department of Forestry and Fire Protection’s (“CAL FIRE”) joint map of Tree Mortality High Hazard Zones (“Tree Mortality Map”); and
- The “CPUC” Fire Threat Map.

The HFTD has three fire threat areas: Zone 1, Tier 2 and Tier 3.

- Zone 1 consists of Tier 1 High Hazard Zones (“HHZs”) on the Tree Mortality Map. Tier 1 HHZs are in direct proximity to communities, roads, and utility lines, and are a direct threat to public safety.
- Tier 2 consists of areas on the CPUC Fire Threat Map where there is an elevated risk from wildfires associated with overhead utility facilities.
- Tier 3 consists of areas on the CPUC Fire Threat Map where there is an extreme risk from wildfires associated with overhead utility facilities.

The CPUC also adopted significant new regulations to enhance the fire safety of overhead electric power lines and communications lines in the HFTD. Those new fire safety regulations modified existing California General Orders (GO) 95 (Rules for Overhead Electric Line Construction), GO 165 (Inspection Requirements for Electric Distribution and Transmission Facilities), and GO 166 (Standards for Operation, Reliability, and Safety During Emergencies and Disasters).

Figure II-2 illustrates the physical and regulatory contexts for this Plan by overlaying the COTP transmission ROW on the respective Zone 1, Tier 2, and Tier 3 HFTD areas. It presents the COTP ROW percentages that are mapped for each of HFTD Tiers 2 and 3. This is the geographic context within which this Plan addresses applicable PUC Section 8387 requirements.

---

<sup>3</sup> Decision 17-01-009 at 39, 48, and Ordering Paragraph 1.mm.

<sup>4</sup> The Tree Mortality Map may be updated from time-to-time by the USFS and CAL FIRE. Any such updates will be incorporated into the HFTD Map in accordance with the procedures set forth in Decision 17-01-009 at Ordering Paragraph 9.

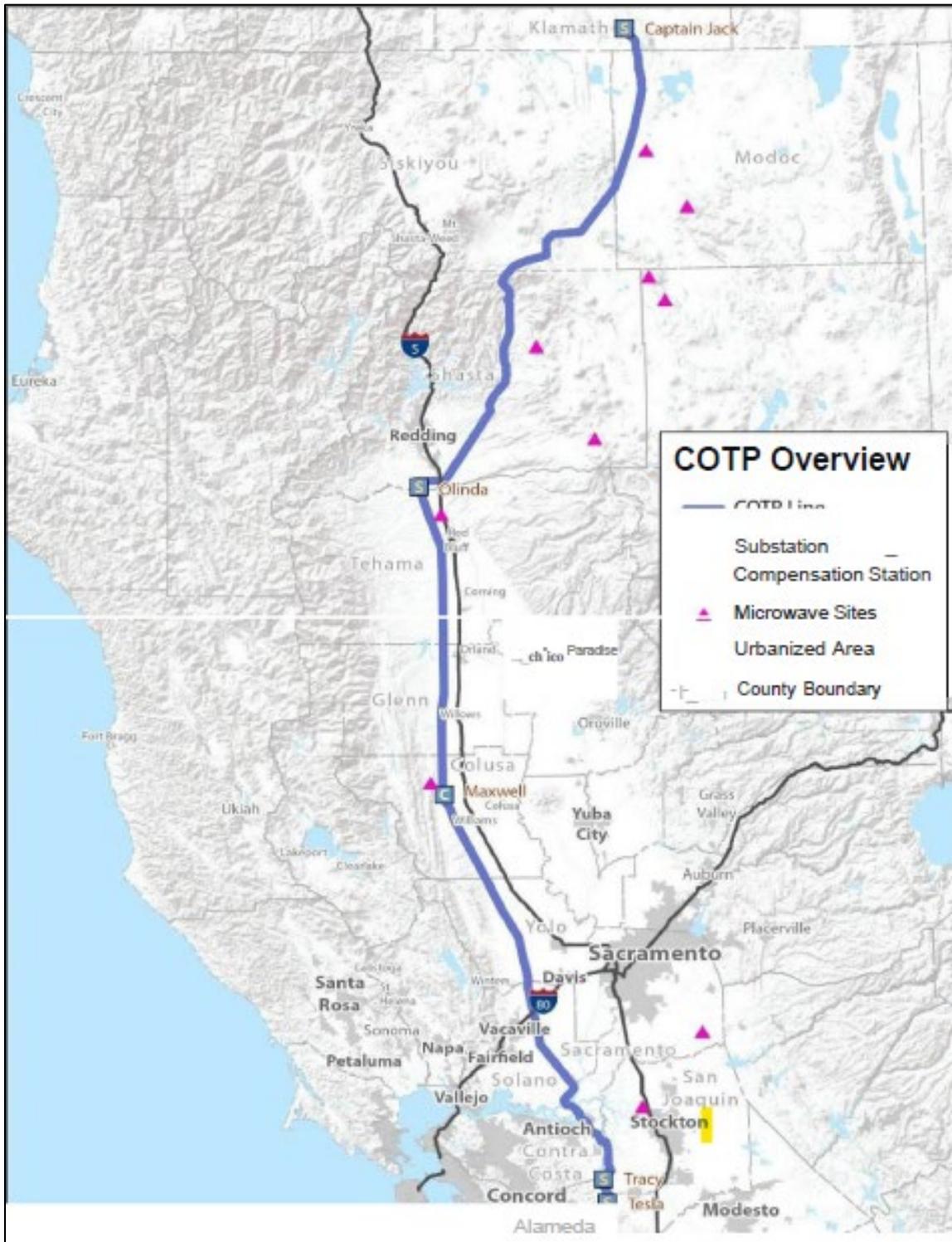
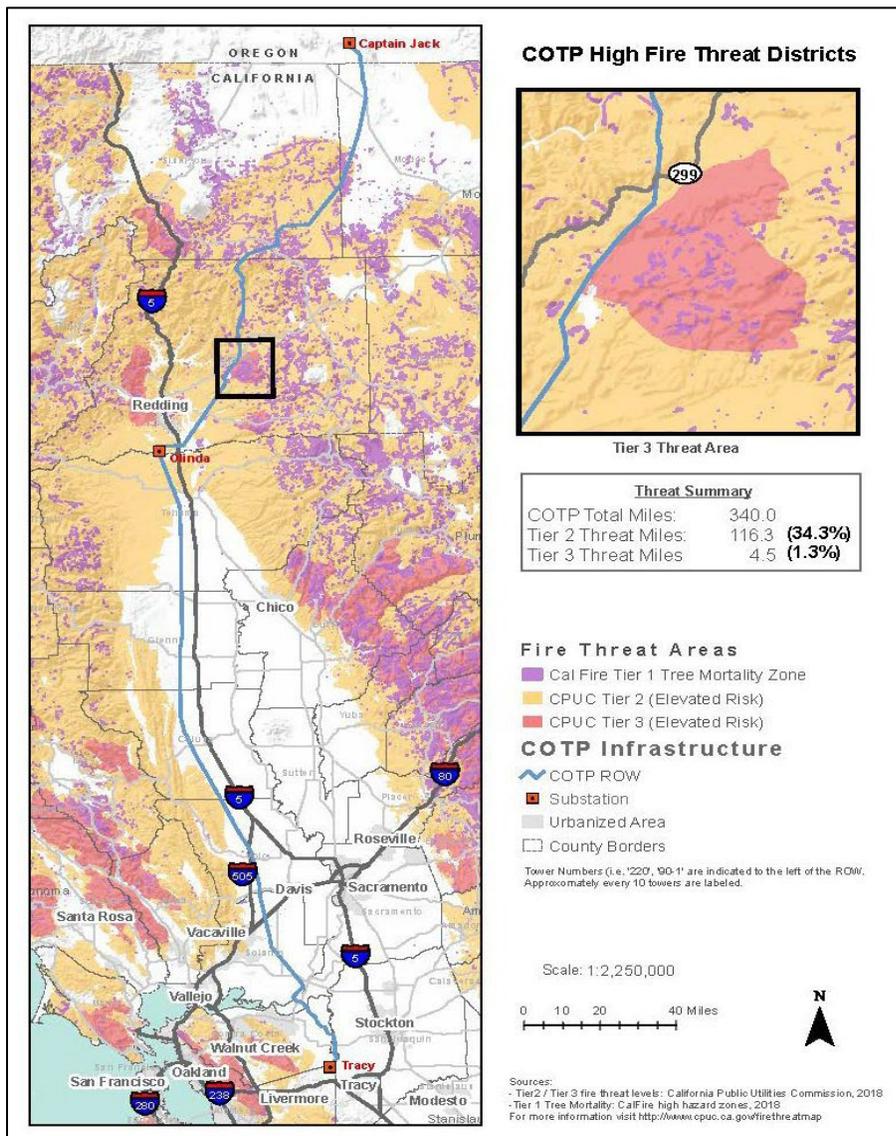


Figure II-1. COTP Overview



**Figure II-2. COTP High Fire Threat Districts**

**D. Changes to CPUC Fire Threat Map**

California PUC Section 8387(B)(2)(K) directs POU's to identify any geographic areas in their respective service territories that are "a higher wildfire threat than is currently identified in the Commission's fire threat map, and where the CPUC should expand the HFTD based on new information or changes in the environment."

TANC does not have an electric service territory or serve end-use electric customers. The geographic areas covered by the COTP are represented by a single ROW and related physical assets, including substations and communication facilities. TANC recognizes the importance of minimizing the potential for those COTP physical assets to ignite wildfires in those geographic areas where they are located.

Accordingly, TANC closely monitored the rulemakings that resulted in the development of the Commission's fire threat map and HFTDs. That monitoring was followed by a detailed mapping of where the HFTDs intersect the COTP ROW. The mapping indicates that 4.5 miles of

the COTP ROW intersects with Tier 3 areas, and 116.3 miles of the COTP ROW intersects with Tier 2 areas (Figure II-2). TANC therefore prioritizes enhanced COTP inspections and maintenance activities such as wildfire risk prevention, mitigation and response strategies in those Tier 3 and Tier 2 areas as appropriate. TANC is also maintaining a high level of awareness of potential wildfire risks in all other geographic areas covered by the COTP ROW and assets through established and routine inspections and maintenance activities.

Based on the results of TANC’s ongoing routine and enhanced COTP inspections and maintenance activities in all fire threat areas, TANC has not identified any geographic areas associated with the COTP ROW and assets that may be a higher wildfire threat than is currently identified in the commissions’ fire threat map and agrees that the HFTD map has properly identified the level of wildfire risk in close proximity to the COTP.

**E. Context-Setting Information Template, Prevailing Wind Speeds, and Average Weather Conditions**

In order to assist the California WSAB in their review of this Plan, we have provided the following context-setting information template followed by tables that summarize prevailing wind speeds and average weather conditions by season at selected locations. The information in this Section is provided within the context of the COTP ROW as the predominant area to which this Plan applies.

**Figure II-3. Context-Setting Information Template**

<b>Utility Name</b>	<b>Transmission Agency of Northern California</b>	
<b>Right of Way Size</b>	The COTP ROW is 6,795 acres; 340 miles long.	
<b>Owned Assets</b>	<input checked="" type="checkbox"/> Transmission <input type="checkbox"/> Distribution <input type="checkbox"/> Generation	
<b>Number of Customers Served</b>	[0] customer accounts. Not Applicable; TANC Markets Wholesale Electricity to its Members and to the COTP Participants.	
<b>Population Within Service Territory</b>	[0] people. Not Applicable. TANC’s Members have Service Territories and are responsible for their respective territories and wildfire mitigation plans.	
<b>Joint Powers Agency Member Makeup</b>	<i>Number of Accounts</i>	<i>Share of Total Load (MWh)</i>
	[.]% Residential; [100]% POU’s [.]% Agricultural; [.]% Small/Medium Business; - [.]% Commercial/Industrial	[.]% Residential; [.]% Government; - [.]% Agricultural; - [.]% Small/Medium Business; [.]% Commercial/Industrial
<b>Right of Way Location/Topography<sup>15</sup></b>	[32]% Agriculture [.2]% Barren/Other [8]% Conifer Forest [1]% Juniper Sage [30]% Grassland [2]% Hardwood Forest [8]% Hardwood Woodland [.4]% Herbaceous [17]% Shrub [.5]% Urban [.9]% Water	

Utility Name	Transmission Agency of Northern California
<b>Right Of Way Wildland Urban Interface<sup>16</sup> (Based On Total Area)</b>	[1.2]% Wildland Urban Interface; [4.3]% Wildland Urban Intermix;
<b>Percent of Right of Way in CPUC HFTDs (based on total area)</b>	<input type="checkbox"/> Includes maps Tier 2: [34.3]% Tier 3: [1.3]% See Figure II-2
<b>Prevailing Wind Directions &amp; Speeds by Season</b>	<input type="checkbox"/> Includes maps Please see tables II-1 and II-2, where we have included brief descriptions of prevailing wind speeds and average weather conditions at selected locations by season.
<b>Miles of Owned Lines Underground and/or Overhead</b>	Overhead Dist.: [0] miles Overhead Trans.: [340] miles Underground Dist.: [0___] miles Underground Trans.: [0] miles
	Explanatory Note 1 – Line Miles
<b>Percent of Owned Lines in CPUC High Fire Threat Districts</b>	Overhead Distribution Lines as % of Total Distribution System (Inside and Outside Service Territory)
	Tier 2: [0]% Tier 3: [0]%
	Overhead Transmission Lines as % of Total Transmission System (Inside and Outside Service Territory)
	Tier 2: [34.3]% Tier 3: [1.3]%
Explanatory Note 4	
<b>Customers have ever lost service due to an IOU PSPS event?</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No Not Applicable - TANC does not directly serve retail customers.
<b>Customers have ever been notified of a potential loss of service to due to a forecasted IOU PSPS event?</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No Not Applicable – TANC does not directly serve retail customers.
<b>Has developed protocols to preemptively shutoff electricity in response to elevated wildfire risks?</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No See Section VI.
<b>Has previously pre-emptively shutoff electricity in response to elevated wildfire risk?</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, then provide the following data for the calendar year 2020: Number of shutoff events: [ ] Customer Accounts that lost service for >10 minutes: [ ] For prior response, average duration before service restored: [ ]
This data is based on the total COTP ROW area using 2010 data from <a href="http://silvis.forest.wisc.edu/data/wui-change">http://silvis.forest.wisc.edu/data/wui-change</a> as a replacement for the WSAB-recommended website, which was not functioning.	

## Prevailing Wind Directions and Speeds

Tables II-1 and II-2 provide information on representative monthly wind directions and speeds along the COTP.

**Table II-1. Prevailing Wind Direction for Selected Locations Along the COTP ROW**

Station	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Ann
Mt. Shasta City	SE	SE	SE	NW	N	N	N	NE	NE	N	NE	SE	N
Redding AP	N	N	N	N	N	N	S	S	N	N	N	N	N
Red Bluff AP	NNW	SSE	N	NNW	SSE	N	S	S	NNW	NNW	NNW	NNW	NNW
Vacaville AP	NNW	S	SSW	SSW	SSW	SSW	S	SSW	SSW	SSW	SSW	NNW	SSW
Sacramento Int. AP	SSE	SSE	S	S	S	S	S	S	S	S	NW	SSE	S

AP: Airport

Prevailing wind direction is based on the hourly data from 1992-2002 and is defined as the direction with the highest percentage of frequency. Many of these locations have very close secondary maximum which can lead to noticeable differences month to month. All directions are where the wind blows from. Source: Western Regional Climate Center. Comparative Table Prevailing Wind Directions. 2021.

**Table II-2. Prevailing Wind Speeds for Selected Locations Along the COTP ROW**

Station	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Ann
Mt. Shasta City	2.3	3.0	3.7	3.8	3.4	3.7	1.8	1.5	2.3	2.5	2.3	2.9	2.7
Redding AP	5.2	6.8	6.4	6.9	6.6	6.9	5.7	5.4	5.7	5.7	4.9	6.2	6.0
Red Bluff AP	7.4	8.9	8.7	8.9	8.5	8.8	7.2	7.0	7.5	7.7	7.5	8.7	8.0
Vacaville AP	4.4	5.5	6.3	7.1	7.0	7.5	7.3	6.7	5.9	5.5	4.4	4.9	6.0
Sacramento Int. AP	6.9	8.0	7.9	8.7	8.6	9.4	9.0	8.4	7.6	7.3	6.4	7.7	8.0

AP: Airport

Average wind speeds are based on the hourly data from 1996-2006 from automated surface observation stations (ASOS) at reporting airports unless otherwise noted.

Source: Western Regional Climate Center. Comparative Table Average Wind Speeds (miles per hour) 2021.

## Average Weather Conditions by Season – Representative Locations

The COTP ROW proceeds southward from the Oregon-California border where average weather conditions are well-represented by the following temperature ranges in Tulelake, McCloud, Redding, Sacramento, and Tracy, California.

- In Tulelake, the summers are warm, dry, and mostly clear and the winters are cold and somewhat dry. Over the course of the year, the temperature typically varies from 20°F to 85°F.
- In McCloud, the summers are warm, dry, and mostly clear and the winters are long, very cold, wet, and partly cloudy. Over the course of the year, the temperature typically varies from 28°F to 86°F and is rarely below 19°F or above 94°F.
- In Redding, the summers are sweltering, dry, and mostly clear and the winters are cold, wet, and partly cloudy. Over the course of the year, the temperature typically varies from 37°F to 99°F and is rarely below 28°F or above 107°F.
- In Sacramento, the summers are hot, arid, and mostly clear and the winters are short, cold, wet, and partly cloudy. Over the course of the year, the temperature typically varies from 39°F to 94°F and is rarely below 31°F or above 102°F.

- In Tracy, the summers are hot, arid, and clear and the winters are short, cold, wet, and partly cloudy. Over the course of the year, the temperature typically varies from 40°F to 92°F and is rarely below 31°F or above 101°F.

### **III. PLAN IMPLEMENTATION ROLES AND RESPONSIBILITIES**

This Section establishes the roles and responsibilities for implementing this Plan as noted below:

- TANC and COTP Governance, Organization, and Management Responsibilities;
- WAPA Organization and Implementation Responsibilities; and
- TANC Responsibilities for Compliance with All Applicable Laws, Orders, and Regulations.

#### **A. TANC and COTP Governance, Organization, and Management Responsibilities**

TANC is a joint powers agency created consistent with California Government Code Section 6500 et. seq. It is governed by a Commission consisting of representatives of each TANC Member. Members of TANC include the Cities of Alameda, Biggs, Gridley, Healdsburg, Lodi, Lompoc, Palo Alto, Redding, Roseville, Santa Clara and Ukiah; the Modesto and Turlock Irrigation Districts; the Sacramento Municipal Utility District (SMUD); and the Plumas-Sierra Rural Electric Cooperative. Each Member appoints its Commissioner and Alternates. The Joint Powers Agreement signed by TANC Members in 1984 set specific guidelines for the organization and governance of the Agency.

Among other items, TANC must abide by the provisions of the California Government Code and specifically the Ralph M. Brown Act, which governs the meetings of local legislative bodies.

TANC is also required to prepare and adopt an annual budget adequate to meet its operation and maintenance costs as well as its debt service obligations.

The TANC Commission has organized the Agency, as shown in Figure III-1 - TANC Organization Chart, to provide for the governance, management, and conduct of TANC's activities. All decisions are made by the Commission except for those specifically delegated to TANC Chair, TANC General Manager, TANC and COTP Committees, or other officers of the Agency. The decision to adopt this Plan will be made by the TANC Commission and the COTP Management Committee. TANC also designates a representative to the COTP Management Committee, the governing body for the Project. The COTP Management Committee provides managerial and policy direction, cooperation, the interchange of information, and decisions and consultation among those entities that constructed, own, operate, and have transmission entitlements on the Project (i.e., COTP Participants). TANC is the Project Manager, and is responsible for all the direction, conduct, coordination, management, and completion of all Project work. As the Project Manager, TANC chairs the COTP Management Committee. The Management Committee oversees and approves all Project work on behalf of the COTP Participants and includes representatives from each of the three Project Participants. TANC is the primary owner and Project Manager for the COTP, and is responsible for providing for the overall management, operation and maintenance of the COTP, and approval of this Plan.

The TANC General Manager has the overall management responsibility for overseeing implementation of this Plan. TANC's General Manager directs and manages the professionals engaged by the Agency to carry out its activities in accordance with the direction provided by the TANC Commission and COTP Management Committee.

#### **B. WAPA Organization and Implementation Responsibilities**

WAPA is one of four Federal Power Marketing Administrations within the United States Department of Energy whose role is to market and transmit wholesale electricity from multi-use

water projects. WAPA also has extensive experience in the operation and maintenance of high-voltage transmission facilities in the Western United States.

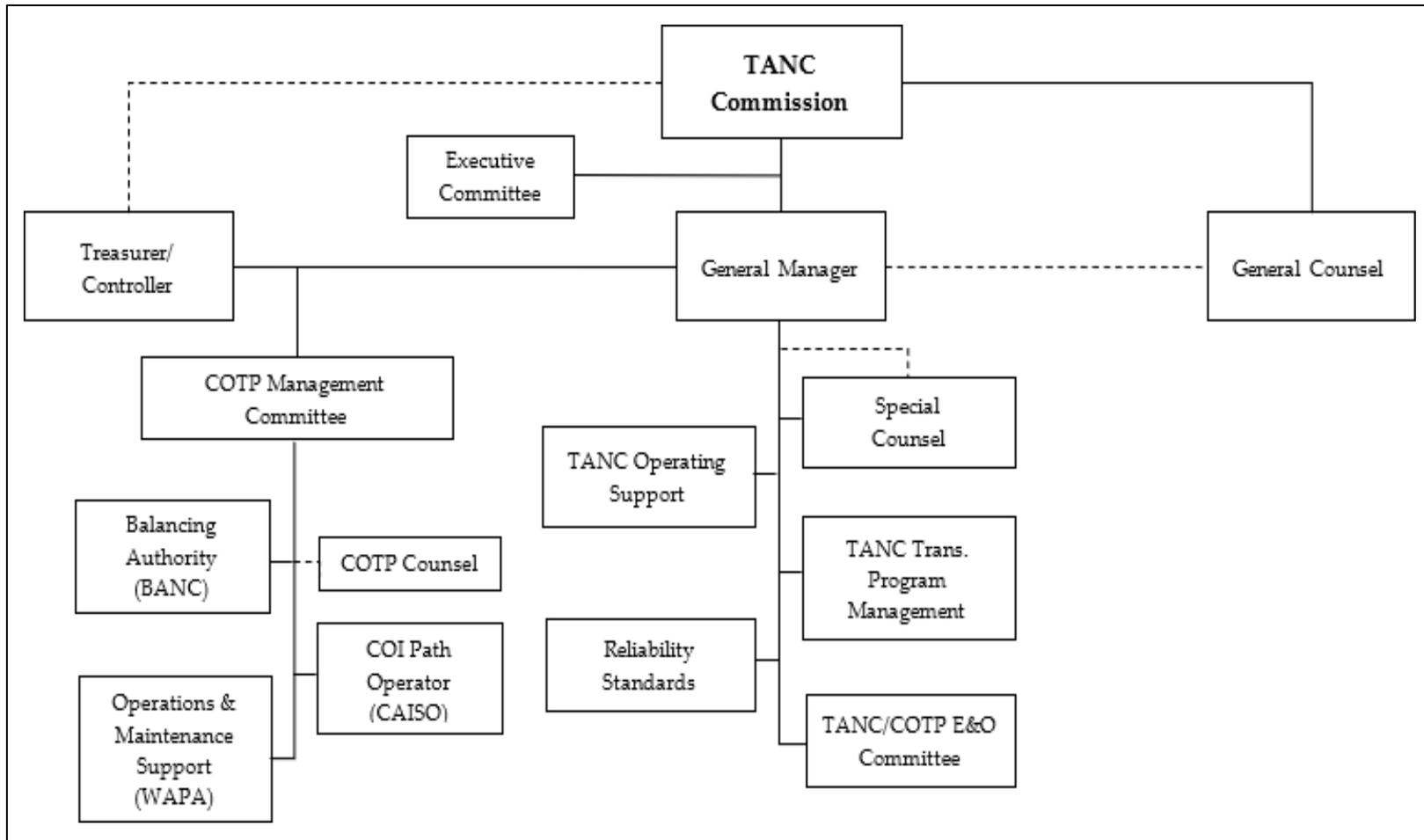
The COTP is located and operated within WAPA's Sierra Nevada Region (SNR). WAPA SNR serves under a contractual agreement with TANC as the operations and maintenance agent for the COTP. The SNR is one of five WAPA regional offices. TANC has full responsibility for compliance with and implementation of this Plan. Acting on behalf of TANC, WAPA supports the implementation of several wildfire-related preventative strategies implemented as part of this Plan under long-standing contractual arrangements with TANC. The contracts include the following:

- The Project Operation and Maintenance Agreement (POMA);
- The TANC-Western Operation and Maintenance Agreement (TWOMA); and
- The TANC-Western Agreement for the Provision of Services Related to the COTP (TANC/Western COTP Agreement).

TANC will also coordinate with federal, state, and local fire management personnel as necessary or appropriate to implement this Plan. This includes, but is not limited to:

- Immediately reporting fires, pursuant to existing TANC and WAPA procedures and the requirements of this Plan;
- Complying with relevant federal, state, and industry standard requirements, including the industry standards established by the CPUC as applicable;
- Collecting and maintaining wildfire data necessary for implementing this Plan; and
- Providing opportunities for regular training programs for relevant personnel associated with Plan implementation responsibilities.

Table III-1 summarizes the TANC and WAPA roles and responsibilities for implementing Plan wildfire prevention strategies, mitigation practices, and related activities.



**Figure III-1. TANC Organization Chart**

BANC: Balancing Authority of Northern California; CAISO: California Independent System Operator. E&O: Engineering & Operations. WAPA: Western Area Power Administration

**Table III-1. TANC-COTP Plan Roles and Responsibilities**

Role	Wildfire Mitigation Responsibility
TANC Commission & COTP Management Committee	Responsibility for Plan Implementation TANC-COTP Plan Adoption & Governance
TANC General Manager	Plan Implementation Management
WAPA SNR Senior Vice President & Regional Manager	WAPA Operating Agent and Maintenance Responsibilities
WAPA SNR Vice President & Maintenance Manager	COTP Assets and Facilities Inspections
WAPA SNR Vegetation Management & Access Roads Manager	COTP Vegetation Management and Access Roads Management and Inspections
TANC & COTP Environmental & Lands Manager	Plan Implementation Management and Interagency Coordination and Collaboration

**C. TANC Responsibilities for Compliance with All Applicable Laws, Orders, and Regulations**

Most of the preventative strategies and activities implemented as part of this Plan will be conducted under existing maintenance and vegetation management rights and obligations within and adjacent to the COTP ROW and at Project communication sites. However, in the event that one or more Plan activities could potentially affect environmental and/or natural resources, applicable federal and state laws, orders, and regulations (LORs) will be followed. These LORs may include, but not be limited to:

- National Environmental Policy Act (42 USC 4321 *et seq.*: ““NEPA”);
- National Historic Preservation Act (Public Law 89-665; 54 U.S.C. 300101 *et seq.*: “NHPA”);
- Federal Endangered Species Act (16 U.S.C. §1531 *et seq.* (1973): “FESA”);
- Clean Air Act (42 U.S.C. §7401 *et seq.* (1970));
- Clean Water Act (33 U.S.C. §1251 *et seq.* (1972));
- California Environmental Quality Act (Public Resources Code sections 21000 *et seq.*);
- California Air Resources Act (CA Health and Safety Code sections 39000 *et seq.*);
- Applicable Sections of the California Fish and Game Code;
- Porter-Cologne Water Quality Control Act (California Water Code sections 13300- 13999 and Title 23 of the California Administrative Code); and
- Applicable Sections of the California Public Resources and Public Utilities Codes.

TANC will also follow applicable industry standards. The CPUC has established minimum overhead line, design, maintenance and inspection standards through GO 95 (Rules for Overhead Electric Line Construction), GO 165 (Inspection Requirements for Electric Distribution and Transmission Facilities), and GO 166 (Standards for Operation, Reliability, and Safety During Emergencies and Disasters). TANC complies with all of these minimum standards.

In addition, the COTP was designed and constructed, and is also maintained by WAPA to comply with federal National Electric Safety Code (NESC) and federal National Electrical Reliability Corporation (FERC) standards that often exceed the corresponding minimum California General Order standards. These standards were required consistent with the federal Congressional authorizations that were required for COTP design, construction, and maintenance. TANC and WAPA therefore comply with these standards as well.

## IV. WILDFIRE RISK AND RISK DRIVERS ASSOCIATED WITH THE COTP

### A. Introduction

This Section summarizes the three-step process TANC used to assess, categorize, analyze, and prioritize COTP wildfire risks (Figure IV-1).



**Figure IV-1. TANC Wildfire Risk Assessment Methodology.**

Each of these three steps is described below.

### B. Risk Assessment Methodology

#### Step 1 – Reliance on Established Risk Assessment Approach

##### 1. Reliability Centered Maintenance

TANC has had an established reliability risk assessment approach since 1993. It is based on the reliability- centered maintenance (RCM) program provided by WAPA on behalf of TANC and the COTP. RCM is a systematic approach to evaluate equipment and resources. It results in a high degree of facility reliability and cost-effectiveness. RCM is highly dependent on monitoring predictive maintenance technologies, such as sensors that augment direct inspections and measurements that can detect the onset of potential equipment failures. The RCM system thereby allows causal stressors to be eliminated or controlled prior to any significant physical deterioration of COTP equipment.

##### 2. WAPA Transmission Line Software Business Rule and Maintenance Priorities

As the Operating Agent under contract to TANC for COTP operations and maintenance, WAPA maintenance personnel rely on the “Western Area Power Administration – SNR Transmission Line Inspection Software Business Rules (Business Rule)”. It was implemented at WAPA SNR to record conditions found during inspections, follow-up corrective actions, and to store inventory data and other information useful in performing inspections. Information is reported at the structure level and enables SNR to meet North American Electric Reliability Corporation (NERC), Western Electricity Coordinating Council (WECC), and California Independent System Operator (CAISO) reporting requirements.

This Business Rule ensures that COTP inspection data is consistent, reports are accurate and justifiable, system performance is optimized, and ultimately that information obtained is beneficial to all users and supports the maintenance program and reliability standards requirements. It applies to transmission line mobile software used for maintenance structures vegetation, and ROW conditions. Users are required to use the Global Positioning System (GPS) functionality to meet compliance requirements demonstrating that the inspection was completed at the specified structure and/or location. Inspection findings are uploaded to the database every time the user comes back to the office, preferably on a daily basis. Maintenance priorities for structure, vegetation, and ROW conditions are summarized below.

### **3. Maintenance Structures**

All structure inspection findings are recorded and prioritized for severity using the maintenance priority rating (MPR) system. The following MPR codes are to be used for structure inspection findings:

A – Good or like new. No action required.

B – Minimal defect. Monitor degradation. The finding currently does not significantly impact system performance and/or reliability (e.g., wood pole twisting, rust on lattice steel structure or hardware, etc.), but the line crew will continue to observe during future patrols for further degradation.

C – Moderate defect. Rehabilitation recommended as scheduled maintenance. The finding, if left unresolved, may have a significant impact on system performance and/or reliability, but does not require immediate attention. These findings can be scheduled to be resolved as part of the annual work plan.

D – Severe defect. Repair, reinforce, or replace as soon as possible. The finding has a significant and immediate impact on system performance and/or reliability and must be resolved as soon as possible.

E – Emergency. Critical defect, repair, reinforce, or replace immediately.

### **4. Vegetation Conditions**

All vegetation inspection findings, including those related to orchards, are recorded and prioritized for severity using the MPR system. When considering MPR codes, the inspector considers the 500kv COTP voltage, required clearance from vegetation to conductors, location of vegetation, species, and temperature. The following MPR codes are to be used for Vegetation findings:

A – No encroachment. No action required.

B – Low Priority. The finding currently does not significantly impact system performance and/or reliability. Monitor condition in the field and incorporate into work plan as necessary.

C – Medium Priority. The finding may significantly impact system performance and/or reliability if not addressed within a reasonable timeframe. The condition is typically addressed within the current or the following annual work plan depending on site conditions.

D – High-Priority. The vegetation is in a location which creates a hazard to personnel in the performance of the line maintenance work effort or exceeds established threshold clearance from the conductor at the time of measurement.

The condition will be addressed as soon as possible within the current or next annual work plan.

E – Emergency. The vegetation has created a hazardous worksite condition for personnel or is preventing equipment set-up to facilitate emergency or urgent repairs to the transmission line, or trees or other vegetation exceeding the following threshold clearance from the conductor at the time of measurement. The condition will be addressed immediately.

## 5. Right of Way Conditions

ROW inspection findings that include conditions involving non-vegetation encroachments, construction activities, material storage or dumping, structures built or relocated, and access road issues such as but not limited to erosion, obstructions, and locks are also recorded. The Maintenance Structure MPR codes are used for ROW findings.

### C. 2022 Maintenance Software Update

In 2022, WAPA upgraded and improved their line inspections by deploying the IQGeo geospatial productivity and collaboration software to enhance the quality of equipment inspections data and information collected. The application was deployed in WAPA's web services cloud that supports all of its storage, computational power, and functionality. Maintenance personnel can access location-specific maintenance records by structure and equipment while entering current inspection data and information. These records are accessible during ground and aerial patrols. IQGeo allows crews to capture information more quickly and easily, and is significantly faster than the software that had been in use for approximately ten years prior.

This database upgrade has made the collection of structure and equipment inspections data more holistic, more current by facilitating greater inspection efficiencies, and more flexible. Overall, it has strengthened the ability to preventatively detect equipment and facility stressors, and therefore maintain COTP reliability while simultaneously addressing potential wildfire ignition risks from COTP equipment and structures.

### Step 2 – Identification and Categorization of Potential Wildfire Risks and Consequences

Based on their experience and expertise, TANC identifies and categorizes the wildfire risks, risk drivers, and potential consequences hypothetically associated with a COTP-caused wildfire ignition event, as summarized below.

#### D. Wildfire Risks and Risk Drivers

TANC has identified four categories of COTP-associated wildfire risks:

- Equipment, Structure, and Facility Failures;
- Topographic and Climatological Factors;
- Object-to-Equipment Contacts; and
- Wire to Wire Contacts.

Those failures capable of ultimately leading to heat, sparks, or flames — combined with flammable debris, litter, vegetation, wood waste, and other debris — could then result in a wildfire. Brief descriptions of each of these identified risks and their respective drivers are provided below.

#### 1. Equipment, Structure, and Facility Failures

- *Downed Conductor*: A downed conductor (or "wire down") occurs when a conductor drops or breaks from its designed attached or spliced location on or between towers and ends up on-the-ground, or free from its attachment point, sometimes in an energized mode. A wire down can result from a variety of factors. An energized conductor can ignite a fire or cause a shock hazard.
- *General Equipment Failure*: Electric equipment failure can be a source of a downed conductor or ignition. Failure of components such as tower failure, conductor splices,

connector, hot line clamps, and insulators can result in wire failure and end up in a wire down situation, sometimes in an energized mode that could ignite a fire.

- *Communication Site Ignition*: Wildfire ignitions associated with communication site equipment could result in a wildfire.
- *Weather-Related Equipment Failure*: Weather conditions may play a large part in the potential failure of COTP equipment. Excessive wind, lightning, and exposure to weather over time can degrade the integrity of the electrical components and lead to failure of one or more of the electrical parts causing an ignition.

The primary risks therefore associated with the design, construction, and operation of the Project towers, conductors, and all associated structural components, facilities, and equipment is the extent to which long-term metal fatigue and structural integrity degradation results from repeatedly applied loads. Metal fatigue is directly related to the number of stress cycles undergone by a part and the level of stress imposed on the part. Fatigue failures increase if parts have stress raising contours or if stress raisers such as notches, holes and keyways are put into the part. There is also a relationship between a metal's ultimate tensile strength and hardness and its ability to handle fatigue loads. The higher the tensile strength and hardness, the more likely it will fatigue if it is subject to high fluctuating loads.

## **2. Topographic and Climatological Risk Factors**

- *Topographic Factors*: The COTP crosses several miles of remote, variable, and often rugged topography and terrain. COTP towers are located at elevations ranging from sea level or slightly below near the Sacramento- San Joaquin Delta to over 6,000 feet in Shasta County. The terrain ranges from flat, cultivated agricultural lands to the Sierra Nevada foothills to steep mountain slopes and lava formations. Lee-side mountain slopes can be prone to strong downslope wind gusts under certain weather conditions. These gusts can cause increased risk of wires down and/or contacts between conductors in that area, leading to potential wildfire ignitions. Winds can also be funneled through canyons and mountain passes, resulting in similar effects.
- *Climatological Factors*: The highest fire danger occurs under weather conditions with very low humidity and strong winds. High temperatures, fuel loading, fuel type, and dead- and live-fuel moisture content are also important factors.
- Climatological risk drivers that may affect the climatic loading and associated stressors on the COTP may include:
  - Higher temperature fluctuations and wind speed impacts;
  - Changing seasonal weather patterns associated with long-term climate change; and
  - Extended drought that may accelerate wear and tear on COTP facilities and equipment.
- *Climate Change Adaptation Risks*: Climate change is a multi-year, long-term risk factor with variable local effects that are not possible to reliably project for the COTP over shorter time frames. This Plan will be implemented to annually account for, document and address the effects of such weather- related factors through annual Plan inspections, monitoring and adjustments directed towards actively reducing wildfire risks on an ongoing basis as they are detected.

### 3. Object-to-Equipment Contacts

- *Vegetation Contact:* Vegetation such as falling or leaning trees, windblown branches, and trees growing in the ROW can contact powerlines under a variety of conditions. The contact can cause sparks or arcs. In some instances, the tree or branch may contact the powerline for a prolonged period and continue sparking or ignite due to resulting sparks.
- *Contact by Foreign Object:* Foreign objects coming into contact with COTP facilities can also introduce sources of ignition. For example, drones or light aircraft contacting the conductors may be highly conductive and could result in phase-to- phase faulting. In the worst-case, this can cause the conductor to fail and land in an energized mode, causing arcing and sparking in dry conditions.
- *Arcs Caused by Unauthorized Burn/Smoke:* Intentional brush and debris pile burning can lead to smoke that can form a low impedance conductive path between high- voltage conductors. The resulting arc can in some cases spark fires on-the-ground below.
- *Insulator Contamination:* Contamination on insulators can create a path for electricity to flow. This unintended path can track and cause a fault. Typical causes are ash, dust, debris and bird excrement on the insulator. High-voltage insulator cleaning paired with monthly inspections is necessary to ensure service is not unintentionally interrupted through a flashover. A proactive contamination prevention and maintenance program removes any material that settles on the surface and retains its insulating properties.
- *Vandalism.* COTP equipment may also be vandalized and damaged, which may cause sparks and fires.

### 4. Wire to Wire Contacts

When two or more energized conductors get within close proximity of one another, they could cause sparks and possible material to be ejected. There are many factors that could lead to such an occurrence. Any type of shaking of the tower or high winds may cause powerlines to sway and touch. Certain types of faults (short circuits) down the line can cause powerlines to gallop (i.e., bounce and buck) that potentially leads to conductors getting within close proximity of one another.

### 5. Wildfire Risk Event

The risk event being addressed in this Plan is the risk associated with the ignition of a wildfire caused by or directly associated with the operations and maintenance of COTP facilities, assets, equipment, and/or personnel.

### 6. Wildfire Consequences

The impacts of a wildfire event can result in substantial loss and financial instability for the COTP Participants, TANC, and its Members. Worst-case scenarios present several consequences that are also particularly meaningful to COTP Participants and operators. Those severe impacts include:

- Injury / death of field crews and/or the public;
- Damage and loss of real and personal property/structures;
- Litigation, resulting in financial impacts to COTP Project Participants, TANC, and its Members;
- Impact to TANC's financial status and creditworthiness;
- Long-duration outages and grid reliability issues;
- Damage to TANC's reputation/erosion of public confidence;

- Environmental, ecosystem, and natural resources damages; acres burned;
- Compliance failures and/or penalties;
- COTP equipment damage; and
- Inability for TANC and the COTP to acquire adequate insurance.

### 7. Wildfire Risks, Risk Drivers, and Potential Consequences Bowtie Framework

TANC has framed COTP wildfire risks, risk drivers/root causes, risk event, and potential consequences in a bowtie diagram (Figure IV-2). The bowtie diagram supports the analysis and prioritization of TANC’s wildfire risks by providing a visual representation that allows TANC to consider a range of potential consequences associated with one or more types of risk.



Figure IV-2. TANC Bowtie Wildfire Risk Assessment Summary Diagram

### Step 3 - TANC and COTP Enterprise-Wide Wildfire Risk Prioritization

Wildfire risk prioritization is an enterprise-wide process for TANC because of the magnitude of the potential consequences. As described in Section III, TANC has several organizational controls in place to manage risks and their consequences. The TANC Commission, General Manager, and TANC and COTP committees meet several times annually to manage Agency risks that can be summarized into five general categories that include:

- Financial Risks;
- Legal Risks;
- Regulatory Risks;
- Security and Safety Risks; and
- Reputational Risks.



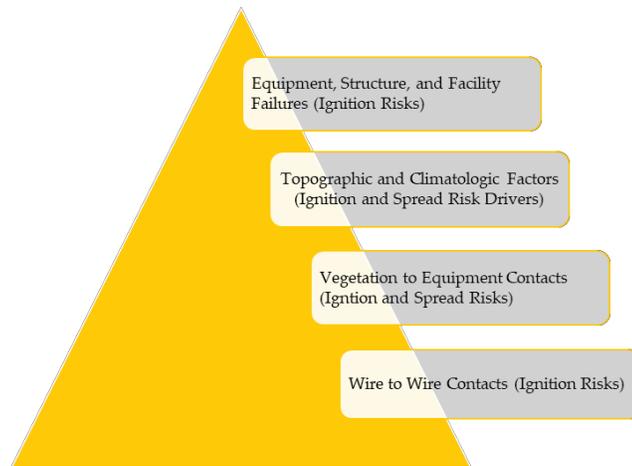
Figure IV-3. TANC Enterprise Risk Categories

The TANC wildfire risks and consequences summarized in the bowtie framework (Figure IV-2) also fall into one or more of these enterprise risk categories (Figure IV-3). TANC has initially prioritized these risks consistent with the intent of PUC Section 8387(a), which states that:

“Each local publicly owned electric utility and electrical cooperative shall construct, maintain, and operate its electrical lines and equipment in a manner that will minimize the risk of wildfire posed by those electrical lines and equipment.”

TANC recognizes that: 1) a fire ignition becomes a wildfire when it spreads beyond immediate containment; and 2) it becomes catastrophic when it spreads to result in consequences that damage lives, property, and other resources. Based on this recognition, TANC has initially prioritized COTP-associated wildfire risks based on those most likely to ignite a fire, and those most likely to cause it to spread to become a potentially catastrophic wildfire. Consistent with these precepts, and routine reviews of COTP reliability risk assessment data, TANC has prioritized potential wildfire risks as presented in Figure IV-4:

These wildfire risks form the basis for the development and implementation of TANC wildfire prevention, mitigation and response strategies presented in Section V.



**Figure IV-4. Prioritized List of TANC-COTP Wildfire Risks**

## V. WILDFIRE PREVENTION, MITIGATION, AND RESPONSE STRATEGIES

### A. Introduction

This Section presents the wildfire prevention, mitigation, and response strategies (Wildfire Strategies) to be implemented as part of this Plan. Two sets of mutually complementary TANC Wildfire Strategies are described below. The first set of strategies are referred to as “Enhanced” Wildfire Strategies. Enhanced Wildfire Strategies are those inspections, maintenance, vegetation and access roads management, and situational awareness activities that are being scheduled more frequently and augmented with technology to address potential wildfire ignition risks that may be associated with the HFTD areas and in specific compliance with PUC Section 8387.

Those Enhanced Wildfire Strategies are then complemented by the second set of established TANC wildfire prevention, mitigation, and response strategies discussed next. The combined implementation of the established and Enhanced Wildfire Strategies is the foundation upon which this Plan will continue to be implemented as it builds upon its lessons learned.

### B. Enhanced Wildfire Prevention, Mitigation, and Response Strategies

TANC’s Enhanced Wildfire Strategies will be implemented with respect a reasonable balancing of time, location, and risk priorities as informed from lessons learned from 2020 through 2022. These time, location, and level of risk considerations to be balanced are described as:

- *Time Prioritization:* Enhanced strategies will be implemented either before the end of June or at any other time each year. For activities scheduled for implementation before the end of June, TANC will consider the forecasted critical fire weather conditions on a county-specific basis. The COTP crosses 12 counties, including (from north to south) Modoc, Siskiyou, Shasta, Tehama, Glenn, Colusa, Yolo, Solano, Sacramento, Contra Costa, San Joaquin, and Alameda. Time prioritization scheduling will always consider the associated fire risks.
- *Location Prioritization:* Enhanced Wildfire Strategies scheduled in HFTD Tier 3 areas are of the first, or highest priority, and strategies scheduled in HFTD Tier 2 areas are of the second highest priority. Enhanced Wildfire Strategies scheduled in all other areas are of the third highest priority. An additional location-related priority is the consideration of whether the strategy can be implemented depending on the level of control TANC has in exercising existing ROW easement rights.
- *Level of Risk Priority:* Enhanced Wildfire Strategies will be implemented consistent with the following risk priorities:
  1. Equipment, structure, and facility failure risks;
  2. Topographic and climatological factors;
  3. Vegetation to equipment contact risks; and
  4. Wire to wire contact risks.

Enhanced Wildfire Strategies scheduled for 2023 through 2025 implementation, consideration, and evaluation for their wildfire risk reduction values are presented in Figures V-1 through V-6. Each of the strategies will be evaluated from 2023 through 2025 and may be modified annually if location-specific or if they are intended to be implemented in high-priority areas along the COTP ROW. Annual modifications will focus on location-specific activities where the highest priority locations are addressed earlier in the three-year evaluation period. The Figures will continue to

include brief descriptions of enhanced strategies and supporting activities, followed by the approach and progress for each of years 2023 through 2025 to support annual monitoring.

Specifically, Figures V-1 through V-6 track the annual approaches and progress achieved for each of the Enhanced Wildfire Strategies to be considered from 2023 through 2025. For each year, the progress achieved becomes the basis for the subsequent years' approach. This is consistent with the monitoring and auditing of plan implementation discussed in greater detail in Section VII, below. New Enhanced Wildfire Strategies begin with number 16 in recognition that the 15 strategies monitored and audited from 2020 through 2022 have been completed or integrated into established programs with appropriate lessons learned. The reader is referred to the 2023 comprehensive revision of this Plan as posted by the California Wildfire Safety Advisory Board for detailed descriptions of the objectives and progress achieved for Wildfire Strategies 1 through 15.

**THE REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK**

**Figure V-1. Wildfire Strategy 16 - Additional Utility Forester**

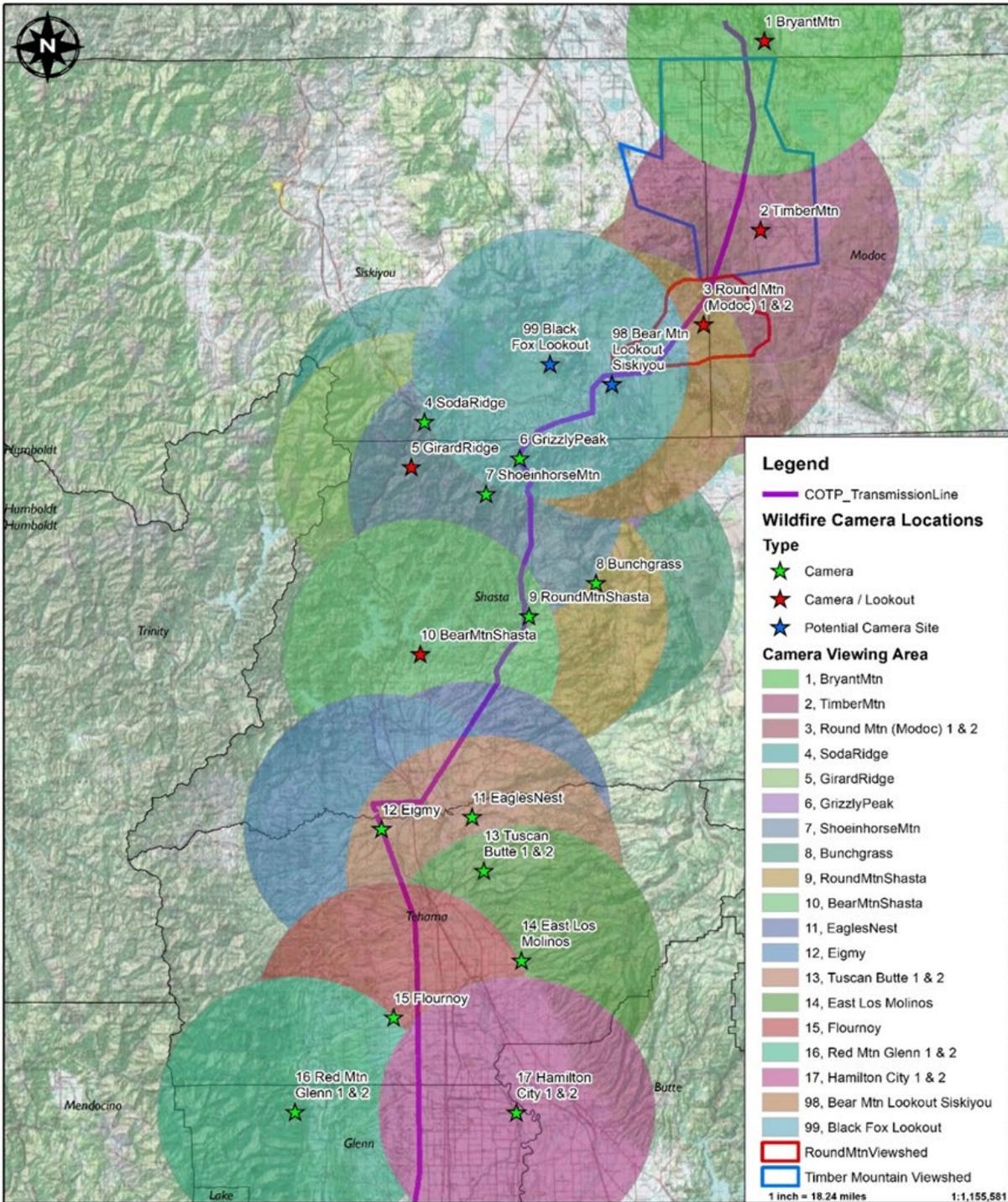
<b>Category: Enhanced Wildfire Strategy</b>	<b>Frequency: Ongoing</b>
<b>HFTD Tier(s): All</b>	<b>Location: In ROW; Outside ROW; Communication Site</b>
<b>Wildfire Risks Addressed:</b> Structure and/or Equipment Failure	
<p><b>Strategy Description:</b>          This strategy supplements current field staff by adding one additional utility forester to provide vegetation management support services. It enables TANC to increase existing capacity to flexibly address vegetation management issues as they arise. The utility forester will be responsible for:</p> <ul style="list-style-type: none"> <li>• Patrolling the COTP ROW, access roads, and communication sites to identify, document and track vegetation encroachments and routine vegetation management activities needed;</li> <li>• Identifying off-ROW and in ROW hazard and/or danger trees and fuel loads;</li> <li>• Preparing work sites by flagging off-ROW boundaries, sensitive resources, hazard and/or danger trees, sediment sources, and access routes; and</li> <li>• Documenting and tracking the progress of all scheduled vegetation and road maintenance projects in the field while maintaining frequent communications with affected landowners.</li> </ul>	
<p><b>2023 Approach:</b>          In 2023, WAPA and TANC will collaboratively focus preliminary efforts on:</p> <ul style="list-style-type: none"> <li>• Documenting the scope of work and corresponding qualifications for the additional utility forester;</li> <li>• Requesting pricing quotes from vendor(s) who offer additional utility forester services and support; and</li> <li>• Determining and budgeting adequate funding needs for the additional utility forester.</li> </ul>	
<p><b>2023 Progress:</b> WAPA is currently assessing what the scope of work will be for the new forester, including time needed for inspections, where in the system the issues are located, and what qualifications/certifications will be needed. WAPA has requested pricing from vendor that currently provides forester services for WAPA for both Registered Professional Forester (RFP) and International Society of Arboriculture (ISA) certified arborist/forester. Additional Utility Forester support will be incorporated into a WAPA fiscal year 2025 contract, with a start date of July 1, 2025.</p>	
<p><b>2024 Approach:</b> The WAPA SNR Vegetation Management and Access Roads Manager and current lead Forester will develop the scope of work for the next year. It will include comprehensive culvert inspections with minor maintenance as needed, support of off-ROW vegetation and access roads inspections, and provide tree-crew oversight as needed.</p>	
<p><b>2024 Progress:</b> WAPA's Vegetation and Road Specialist and current Lead Forester have developed a Fiscal Year 2025 scope of work, which includes comprehensive culvert inspections with minor maintenance as needed, support off-ROW inspections, and providing tree-crew oversight as needed.</p>	
<p><b>2025 Approach:</b> The New Utility Forester contract will be awarded in July 2025. This contract will have a period of performance of 5 years through June 2030.</p>	
<p><b>2025 Progress:</b></p>	
<p><b>Wildfire Risk Reduction Lessons Learned:</b></p>	

**Figure V-2. Wildfire Strategy 17 - COTP ROW Visual Coverage for Wildfire Detection**

<b>Category:</b> Situational Awareness	<b>Frequency:</b> Ongoing
<b>HFTD Tier(s):</b> All	<b>Location:</b> In ROW; Outside ROW
<b>Wildfire Risks Addressed:</b> Topographic/Climatological, Emergency and Wildfire Response Constraints	
<p><b>Strategy Description:</b> This strategy will compile information on viewsheds from existing fire lookout stations, remote camera networks, and other sources with the intent of: 1) mapping the extent of existing visual coverage of the COTP ROW; and 2) identifying COTP segments where visual wildfire detection gaps exist. TANC may contract for additional viewshed analyses to determine how and where those visual wildfire detection gaps need to be filled with remote cameras or other related technologies. Based on the mapping efforts, TANC will then coordinate with the appropriate agencies and/or landowners regarding the feasibility of installing remote cameras to fill those visual wildfire detection gaps along the COTP ROW.</p>	
<p><b>2023 Approach:</b> TANC will coordinate with WAPA, the USFS, CAL FIRE, representatives of the ALERT WILDFIRE system, PG&amp;E, and others as needed to identify the extent of the COTP ROW that can currently be viewed for detecting wildfires. This will include requests for existing viewshed geographic information system (GIS) shapefiles from fire lookout stations and remote cameras, the development of COTP ROW viewshed maps using that data, and tentative identification of where ROW visual gaps exist.</p>	
<p><b>2023 Progress:</b> TANC staff worked with TANC’s Registered Professional Forester (RPF) to develop maps that depict COTP viewsheds from camera networks and lookouts covering the extent of visual coverage of the COTP ROW. TANC’s RPF identified 34 separate camera and/or lookout stations that provide this coverage. All but one of the cameras are within the AlertCalifornia network<sup>5</sup>. ALERTCalifornia’s high-definition cameras are able to pan, tilt, zoom and perform 360-degree sweeps approximately every two minutes with 12 high-definition frames per sweep. The cameras also provide 24-hour monitoring with near-infrared night vision capabilities. Each can view as far as 60 miles on a clear day, and 120 miles on a clear night. Using the cameras and associated tools, first responders with the California Department of Forestry and Fire Protection (CAL FIRE) can rapidly confirm fire ignition, quickly scale fire resources, support evacuations through enhanced situational awareness and monitor fires through containment.</p> <p>ALERTCalifornia’s camera network is monitored by trained fire professionals at regional command and control centers across the state. Most fires within view of the cameras have already been reported, and some may be prescribed burns. Visual coverage for the northern and southern segments of the COTP are presented in the maps on the two pages immediately following this Figure V-2.</p>	
<p><b>2024 Approach:</b> WAPA and TANC will confer regarding any additional COTP visual coverage that may be beneficial with respect to wildfire risk reduction, reducing incident response times to the COTP ROW, or more redundant coverage if needed. If such coverage is desired, TANC will investigate providing support to additional camera and/or fire lookout resources that can directly provide additional, relevant information regarding COTP ROW situational awareness.</p>	
<p><b>2024 Progress:</b> WAPA Operations Management personnel, the TANC Commission, and other COTP managers were consulted with respect to their needs for additional visual coverage of the COTP as camera or lookout stations. No such additional coverage needs were expressed.</p>	
<p><b>2025 Approach:</b> Situational awareness is an important consideration for TANC and the COTP. This strategy will remain open, and WAPA and TANC will continue to confer regarding any additional COTP visual coverage that may be beneficial with respect to wildfire risk reduction, reducing incident response times to the COTP ROW, or more redundant coverage if needed. If such coverage is desired, TANC will investigate providing support for siting additional camera and/or fire lookout resources that can directly provide additional, relevant information regarding COTP ROW situational awareness.</p>	

**Figure V-2. Wildfire Strategy 17 - COTP ROW Visual Coverage for Wildfire Detection**

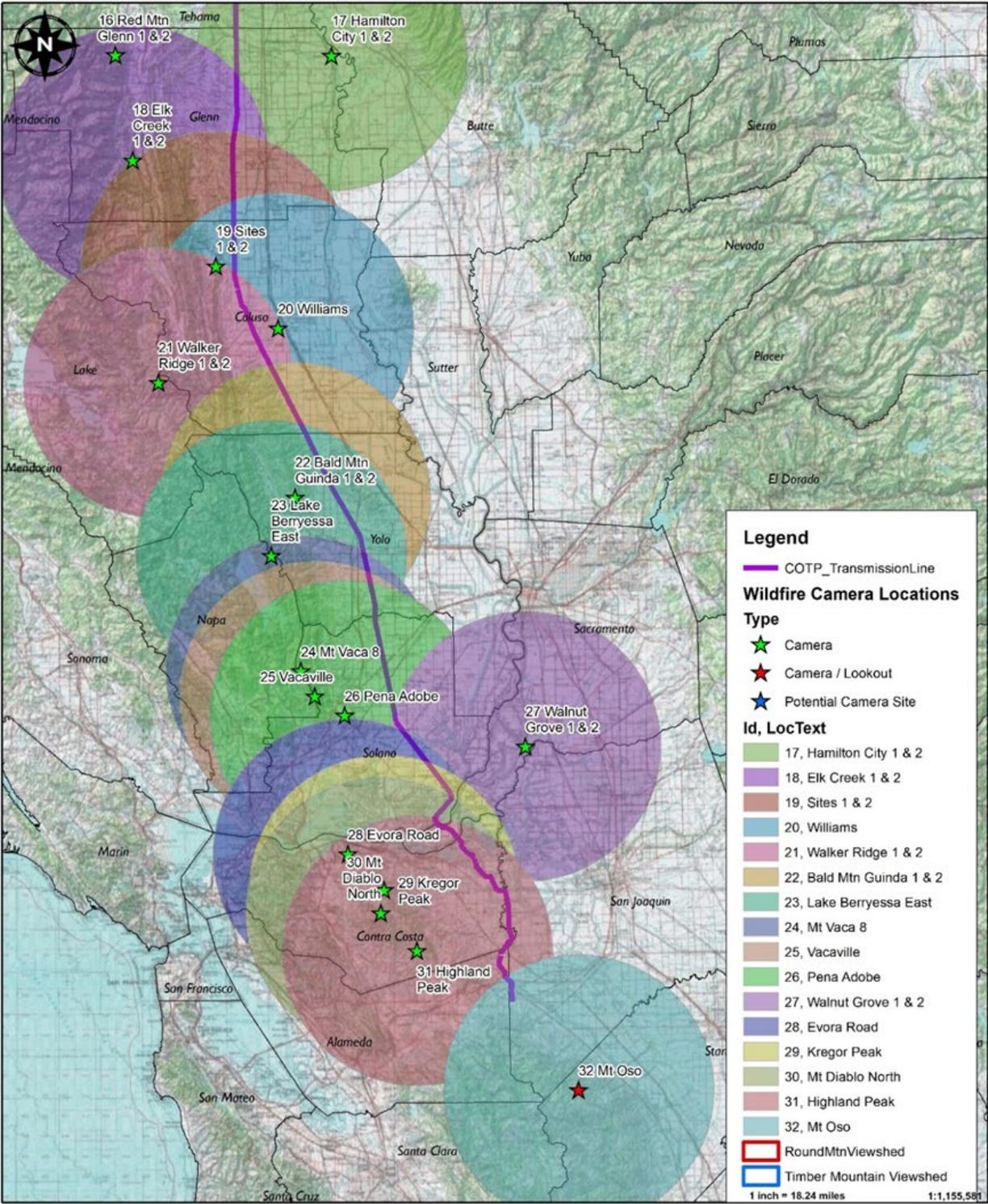
<b>Category:</b> Situational Awareness	<b>Frequency:</b> Ongoing
<b>HFTD Tier(s):</b> All	<b>Location:</b> In ROW; Outside ROW
<b>Wildfire Risks Addressed:</b> Topographic/Climatological, Emergency and Wildfire Response Constraints	
<b>2025 Progress:</b>	
<b>Wildfire Risk Reduction Lessons Learned:</b>	



## COTP Wildfire Cameras and Lookouts Visual Coverage - Northern Segment

Confidential - Do not copy or distribute without written permission of TANC

Circles represent 20-mile view radius from camera centerpoint location  
 Polygons represent lookout locations viewshed  
 Date: 11/30/2023



### COTP Wildfire Cameras and Lookouts Visual Coverage - Southern Segment

Confidential - Do not copy or distribute without written permission of TANC.

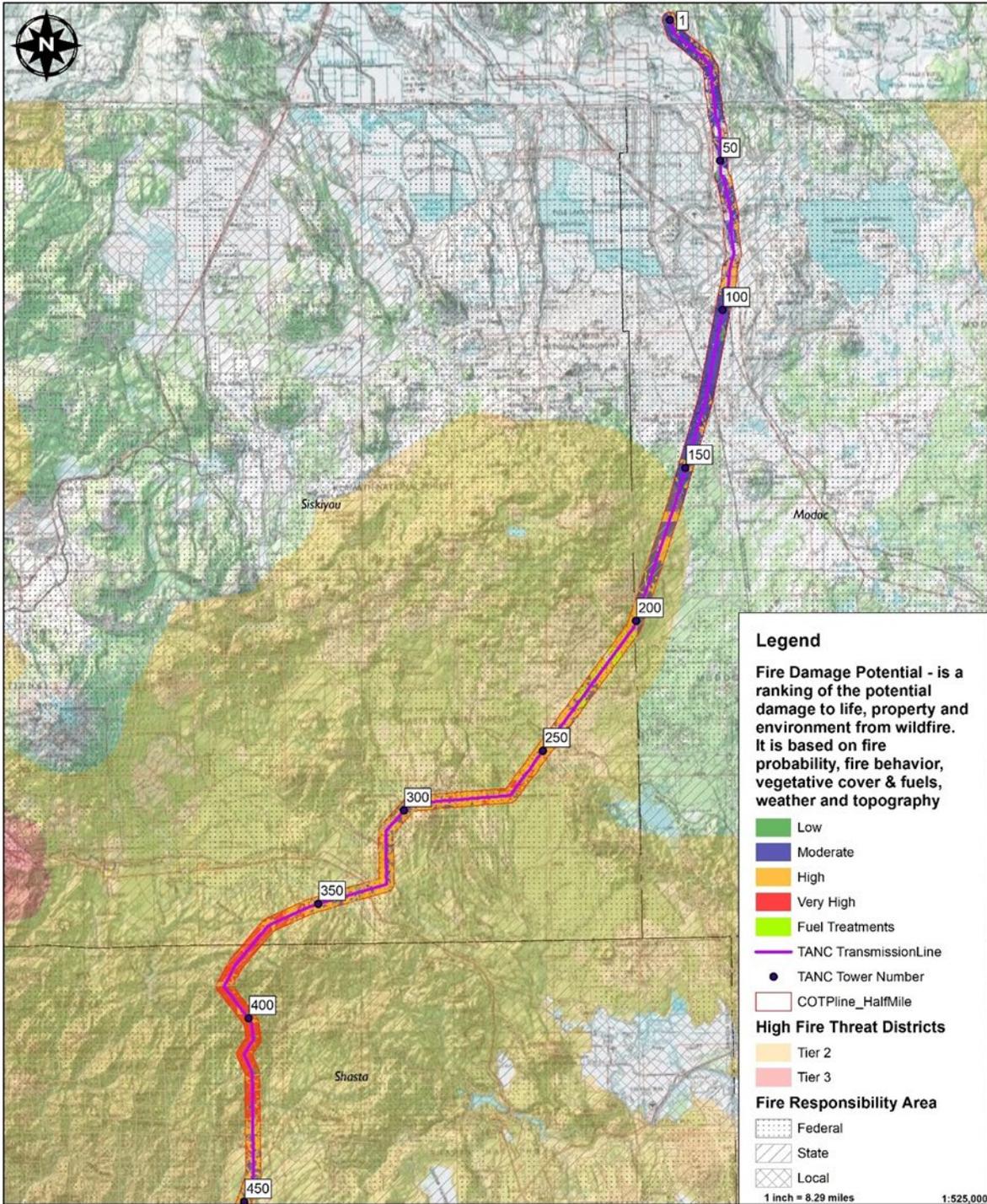
Circles represent 20-mile view radius from camera centerpoint location  
 Polygons represent lookout locations viewshed  
 Date: 11/30/2023

**Figure V-3. Wildfire Strategy 18 - COTP ROW Fuels Accumulations & Fuel Breaks Assessment**

<b>Category:</b> Situational Awareness	<b>Frequency:</b> Ongoing
<b>HFTD Tier(s):</b> All	<b>Location:</b> In ROW; Outside ROW
<b>Wildfire Risks Addressed:</b> Topographic/Climatological, Emergency and Wildfire Response Constraints	
<p><b>Strategy Description:</b> This strategy will focus on the northern segment of the COTP ROW across forest and shrublands. It will be directed primarily towards four efforts, including:</p> <ol style="list-style-type: none"> <li>1. Mapping existing fuels accumulations along the COTP ROW to prioritize highest-risk areas using Light Detection and Ranging (LiDAR) and other available methods and information;</li> <li>2. Characterizing the existing network of fire breaks and fuel breaks along the COTP ROW;</li> <li>3. Identifying and prioritizing areas where expanded and/or additional fuel breaks would reduce flammable fuels adjacent to the COTP ROW; and</li> <li>4. Coordinating with state and local agencies and landowners regarding the expansion of existing fuel breaks, or the development of new fuel breaks focused on reducing wildfire risks near the COTP.</li> </ol>	
<p><b>2023 Approach:</b> TANC will focus on the first two efforts within this strategy:</p> <ol style="list-style-type: none"> <li>1. Mapping existing fuels accumulations along the COTP ROW to prioritize highest-risk areas using LiDAR and other available methods and information;</li> <li>2. Characterizing the existing network of fire breaks and fuel breaks along the COTP ROW; GIS-based mapping of current fuels accumulations and existing fuel breaks locations, ownership, and environmental and natural resources layers will be augmented by site visits. This mapping and visits will serve as a basis for the identification and prioritization of candidate areas for expanded or new fuel breaks that can support wildfire response and risk reduction activities.</li> </ol>	
<p><b>2023 Progress:</b> TANC has completed the objectives of mapping fuels accumulations along the COTP ROW and characterizing the existing network of fire breaks and fuel breaks through the development of four maps – on the pages immediately following this Figure V-3 - that present the fuels-related Fire Damage Potential (FDP) within a one-half mile distance from the COTP transmission line.</p> <p>FDP is a ranking of the potential damage to life, property and environment from wildfire. It is based on fire probability, fire behavior, vegetative cover, vegetative fuels, weather and topography. FDP within one-half mile of the COTP ROW was developed by TANC’s Registered Professional Forester (RPF). The FDP classifications of Low, Moderate, High, and Very High were based primarily on an evaluation and comparison of the quality and accuracy of the following seven geographic information system (GIS) data, information, and layers:</p> <ol style="list-style-type: none"> <li>1. Wildland Fire Threat (CALFIRE Fire and Resource Assessment Program (FRAP): 2014);</li> <li>2. Oregon Statewide Wildfire Risk Map (2018);</li> <li>3. National Land Cover (2021);</li> <li>4. U.S. Historic Fire Perimeters (1966-2021);</li> <li>5. State Permitted Timber Harvest Activities (1996-2023);</li> <li>6. United States Forest Service Hazardous Fuel Treatment Reduction Polygons (2024)</li> <li>7. CALFIRE Fuel Reduction Projects (2019-2023)</li> </ol> <p>Key considerations in the analysis included the need confirm the wildfire risks and resulting Fire Damage Potential determinations - including an accounting for fuels treatments work along and near the COTP ROW. Determinations therefore use the most current, complete, and accurate information on recent land disturbances (harvest, wildfire, hazardous fuel treatments) in combination with on-the-ground observational data of the COTP ROW and surrounding areas regarding wildfire intensity as it relates to land cover.</p>	
<p><b>2024 Approach:</b> TANC and WAPA will meet to discuss fuels accumulations within and adjacent to the COTP ROW. Those discussions will focus on prioritizing those locations where more aggressive fuel reductions and maintenance activities would provide the greatest wildfire risk reduction benefits to TANC and the COTP. Based on the locations identified, TANC will identify the appropriate federal, state, and local agencies and land managers and/or owners that may be affected. Depending on those agencies and interests, TANC will explore the development of additional or expanded agreements with CAL FIRE and/or the USFS, or fuels reduction agreements with private landowners.</p>	

**Figure V-3. Wildfire Strategy 18 - COTP ROW Fuels Accumulations & Fuel Breaks Assessment**

<p><b>2024 Progress:</b> TANC has prepared a much more detailed set of internal FDP maps. These maps were then used to support continuing WAPA and TANC discussions focused on a more localized and site-specific prioritization of those COTP span segments where more aggressive fuel reductions and maintenance activities would provide the greatest wildfire risk reduction benefits to TANC and the COTP. WAPA has begun developing performance work specifications for vegetation management contractors to reduce COTP ROW fuels accumulations.</p>
<p><b>2025 Approach:</b> TANC is collaborating with the Modoc National Forest regarding the Deep Refuge Project. The planned fuels reduction activities — located within ½ to two miles of the COTP ROW — include approximately 10,576 acres of forest thinning, 11,787 acres of prescribed burns, and the removal of smaller vegetation within 150 to 200 feet of 30 miles of identified COTP access roads. WAPA will continue developing scopes of work for COTP vegetation management contractors.</p>
<p><b>2025 Progress:</b></p>
<p><b>Wildfire Risk Reduction Lessons Learned:</b></p>

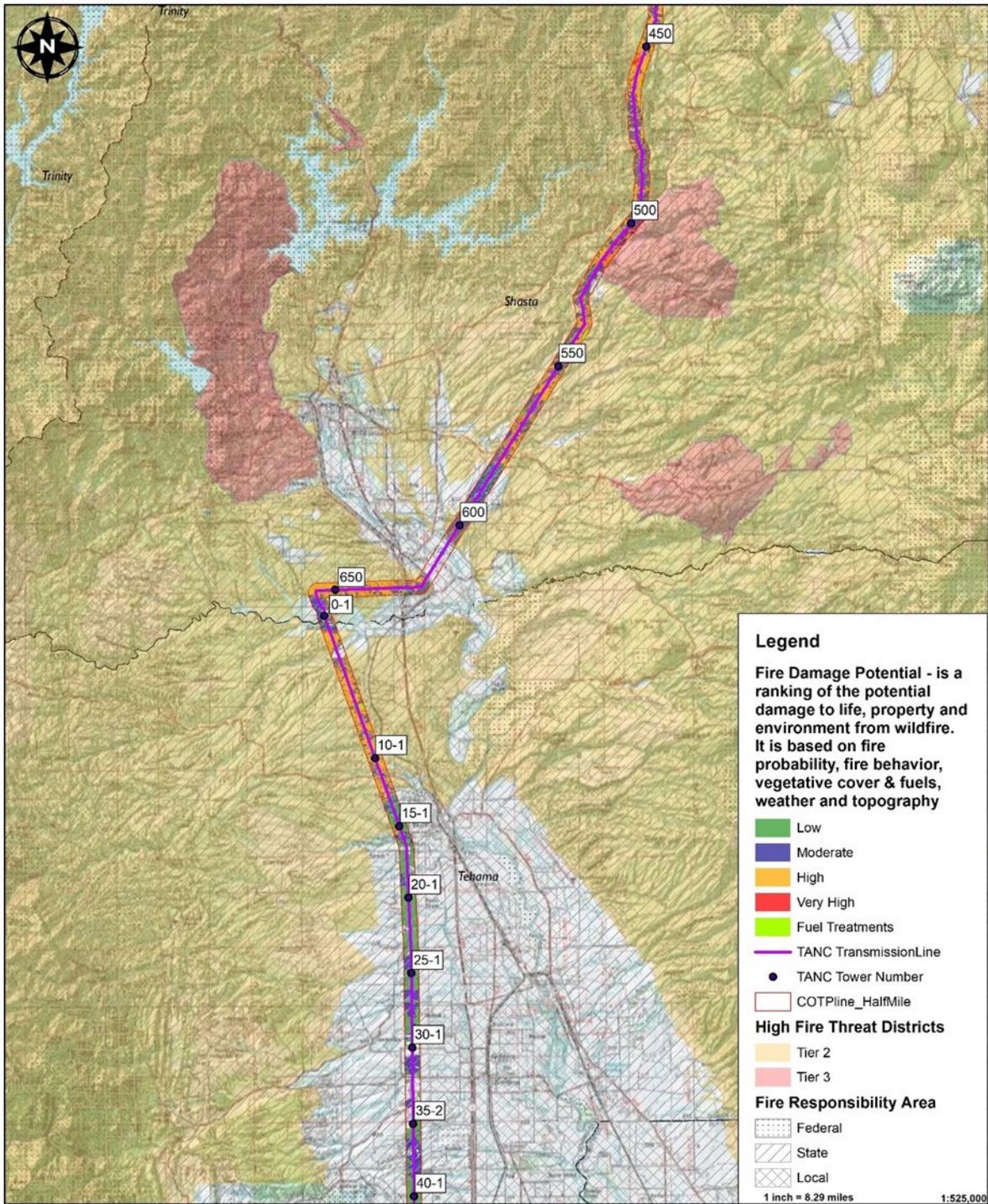


Fire Damage Potential within One Half Mile of COTP Line Map 1 of 4

Confidential - Do not copy or distribute without written permission of TANC

Fire Damage Potential based on Land Cover Type and Fire Hazard Threat

Date: 3/29/2024

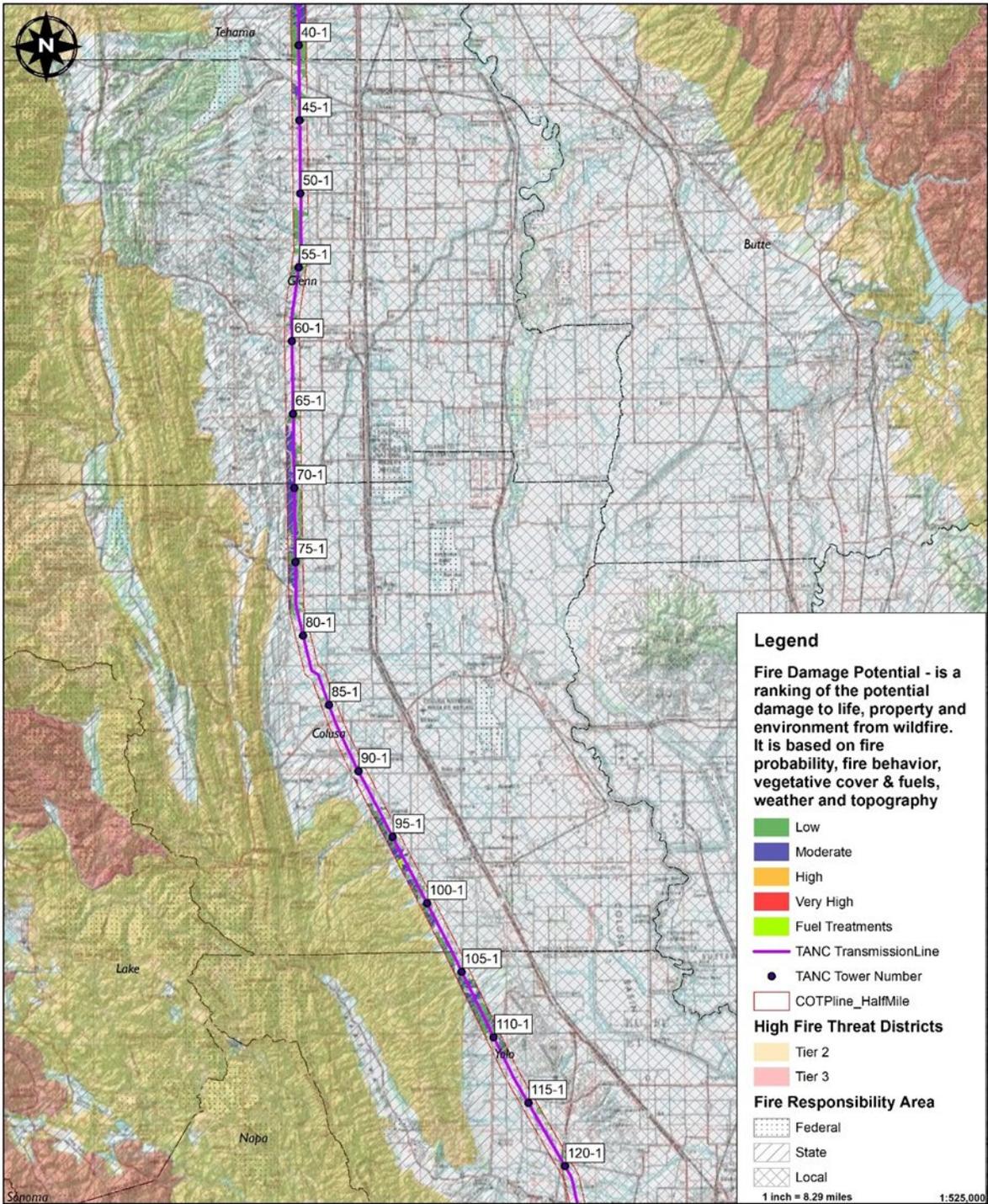


Fire Damage Potential within One Half Mile of COTP Line Map 2 of 4

Confidential - Do not copy or distribute without written permission of TANC

Fire Damage Potential based on Land Cover Type and Fire Hazard Threat

Date: 3/29/2024

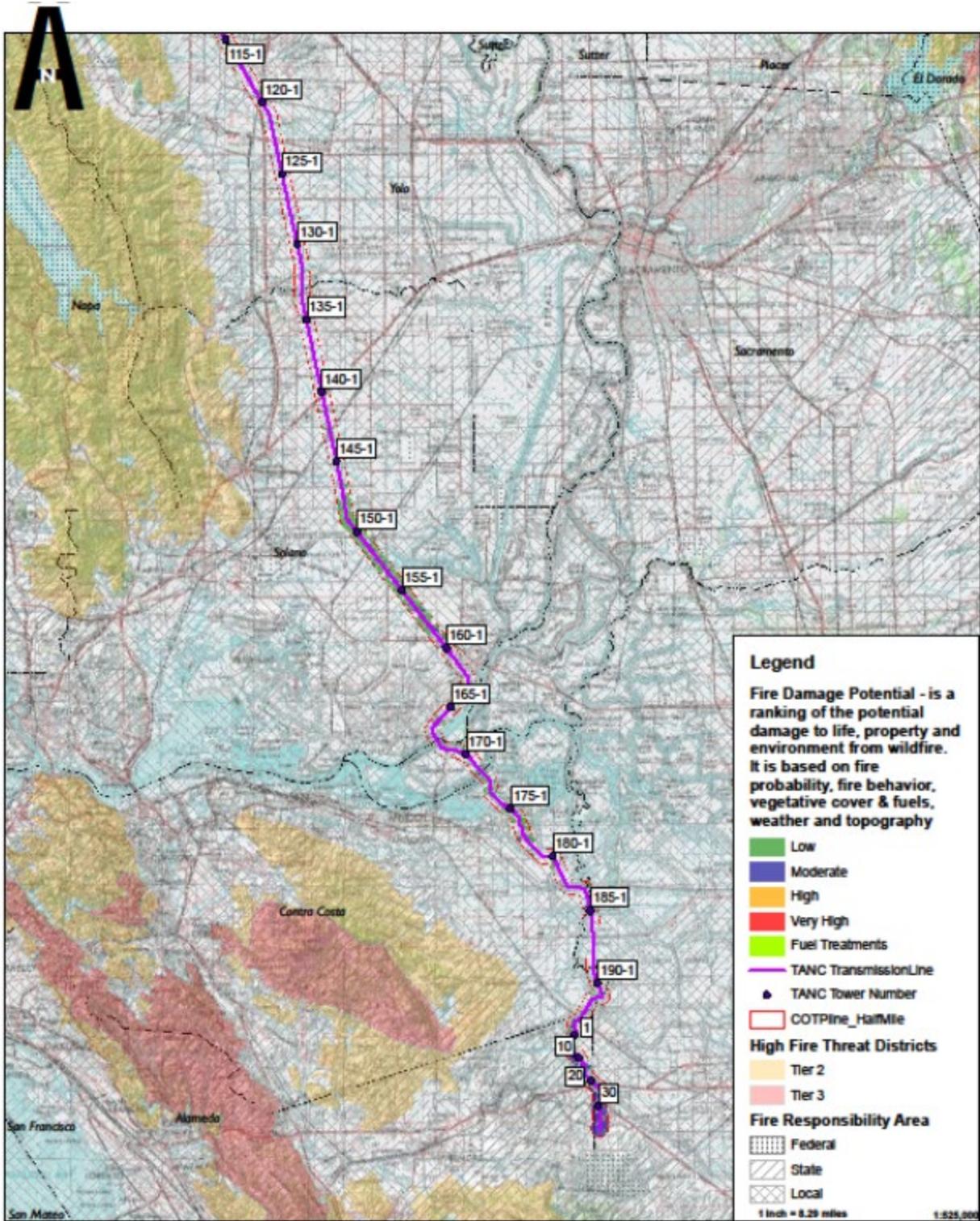


Fire Damage Potential within One Half Mile of COTP Line Map 3 of 4

Confidential - Do not copy or distribute without written permission of TANC

Fire Damage Potential based on Land Cover Type and Fire Hazard Threat

Date: 3/29/2024



### Fire Damage Potential within One Half Mile of COTP Line

Map 4 of 4

Confidential - Do not copy or distribute without  
written permission of TANC

Fire Damage Potential based on Land Cover Type and Fire Hazard Threat

Date: 3/29/2024

**Figure V-4. Wildfire Strategy 19 - Expanded Collaboration with State & Local Agencies**

<b>Category:</b> Vegetation Inspections & Management	<b>Frequency:</b> Ongoing
<b>HFTD Tier(s):</b> All	<b>Location:</b> In ROW; Outside ROW
<b>Wildfire Risks Addressed:</b> Topographic/Climatological, Emergency and Wildfire Response Constraints	
<p><b>Strategy Description:</b> This strategy focuses on expanding COTP wildfire risk reduction collaboration activities to California state and local agencies who have identified wildfire risk reduction projects that may be mutually beneficial to the COTP and the surrounding local areas. Emphasis will be placed on prioritizing projects already identified by local agencies that are ready for implementation with respect to all environmental permitting.</p> <p>TANC will explore opportunities for entering into funding agreements with the appropriate local entities to implement fuels reduction activities that protect the COTP ROW and areas and communities adjacent thereto. This strategy may be used for fuels reduction, fuel breaks, or other fuels treatment and fire response projects where the wildfire risk reduction benefits are most advantageous to TANC and the potentially benefitting localities.</p>	
<p><b>2023 Approach:</b> TANC will confer with CAL FIRE to identify specific CAL FIRE unit plans, battalions, and accompanying projects near the COTP ROW that may be candidates for funding. Additional efforts will include coordination with one or more California Fire Safe Councils to identify potential opportunities for fuels reduction projects of mutual benefit.</p>	
<p><b>2023 Progress:</b> Progress achieved in assessing the visual coverage of the COTP and the Fire Damage Potential (FDP) from fuels accumulations in Wildfire Strategies 17 and 18 now provides TANC and the COTP with a wide range of alternative approaches for reducing COTP wildfire risk reduction in collaboration with CAL FIRE, the USFS, and other potentially affected agencies and interests. This knowledge, when combined with the COTP ROW and off-ROW information that WAPA collects from on-the-ground inspections, several types of aerial imagery, and a longstanding database of vegetation management activities, sets the stage for targeting the most effective COTP wildfire risk reduction projects that can be considered for implementation in the field</p>	
<p><b>2024 Approach:</b> TANC and WAPA will review the information that has been developed from those Wildfire Strategies, and information collected with respect to the ongoing COTP inspections and wildfire-related assessments that WAPA provides. The review will provide insights regarding the needs and priorities associated with expanded agreements with the USFS for fuels treatments on federal lands managed by the USFS, selected State Responsibility Areas under CAL FIRE’s responsibility, and local Fire Safe Council projects with potential wildfire risk reduction benefits to TANC and the COTP. The focus of these collaborations will be targeting locations where wildfire risk benefits will be of the greatest benefit for the COTP.</p>	
<p><b>2024 Progress:</b> Progress in this strategy was delayed in 2024 as WAPA and TANC developed more detailed, local FDP maps along the COTP ROW under Wildfire Strategy No. 18, above. The preparation of those more detailed, local FDP maps and the prioritization of COTP span segments for reducing vegetative fuels now provides the basis for meeting and collaborating with State and Local agencies – including CAL FIRE – with a unified and informed approach regarding those areas where it would be most beneficial to reduce wildfire-related fuels risks near the COTP.</p>	
<p><b>2025 Approach:</b> TANC and WAPA will continue to pursue meetings with CAL FIRE regarding mutually beneficial opportunities to develop larger scale fuels projects that could take advantage of the California Vegetation Treatment Program (VTP) and/or local projects led by fire safe councils that could include wildfire risk reduction benefits to the COTP. TANC will support the Modoc National Forest’s needs for the completion of cultural/heritage surveys and timber survey and layout activities using local agency contracts and contractors as needed and appropriate.</p>	
<p><b>2025 Progress:</b></p>	
<p><b>Wildfire Risk Reduction Lessons Learned:</b></p>	

**Figure V-5. Wildfire Strategy 20 - COTP Tier 3 & Tier 2 Access Road Maintenance & Brushing**

<b>Category:</b> Access Road Maintenance	<b>Frequency:</b> Annual
<b>HFTD Tier(s):</b> All	<b>Location:</b> In ROW; Off-ROW; Communication Sites
<b>Wildfire Risks Addressed:</b> Topographic/Climatological, Emergency and Wildfire Response Constraints	
<b>Strategy Description:</b> This strategy will focus on the new herbicide and brushing master contract that WAPA will be implementing that streamlines the process for expediting road maintenance and improvement activities on an ongoing basis. The scope of work for road maintenance and related activities will include: 1) access road assessments and recommendations; 2) cutting roadway vegetation; 3) removing and disposing of deadfall from access roads; 4) vegetation mowing and brushing; and 5) herbicide applications.	
<b>2023 Approach:</b> In 2023, WAPA will target approximately five miles of access road maintenance and brushing in the Tier 2 HFTD.	
<b>2023 Progress:</b> Contractor brushing crews cleared approximately seven miles of COTP access roads along the COTP transmission line in 2023.	
<b>2024 Approach:</b> WAPA has expanded the scope of COTP access road brushing work to approximately 47 miles of brushing to improve access roads from COTP tower numbers 385 through 490. In addition to brushing, contractor crews will repair roads damaged from the winter of 2022 to 2023 storms from COTP towers 531 to 540. Brushing and road construction vendors are working on proposals and quotes for WAPA’s review. Brushing crews will continue to clear access roads along the COTP transmission line. They cleared an additional eight miles during the first quarter of 2024. WAPA currently has one 4-person brush crew working.	
<b>2024 Progress:</b> Approximately 30 miles of COTP access road brushing was completed in 2024.	
<b>2025 Approach:</b> Access road brushing contractors under WAPA supervision will continue to clear access roads along the COTP ROW from the Captain Jack to Olinda substations.	
<b>2025 Progress:</b> As of March 31, 2025, contracted access road brushing crews had already cleared an additional eleven miles of COTP access road brush encroachments. WAPA currently has one 4-person brush crew working.	
<b>Wildfire Risk Reduction Lessons Learned:</b>	

**Figure V-6. Wildfire Strategy 21 - Microwave Sites Defensible Space**

<b>Category:</b> Communication Site Inspections		<b>Frequency:</b>
<b>HFTD Tier(s):</b> All		<b>Location:</b> In ROW; Outside ROW; Communication Site
<b>Wildfire Risks Addressed:</b> Equipment, Structure, and Facility Failures		
<p><b>Strategy Description:</b> This strategy is intended to fire harden the area immediately surrounding COTP microwave communication sites to protect those vulnerable facilities and: 1) reduce the risk of outward spread of a fire that has ignited from within the facility while also; 2) providing improved perimeter safety that protects the sites from approaching external-source fires. Microwave sites are currently cleared of vegetation within the fenced perimeter and 10 feet outside of that perimeter. This effort would extend that perimeter beyond the current 10 feet to a distance up to 100 feet if possible. The extent of the expanded hardened perimeter will depend on land ownership and land management restrictions. This strategy will follow Cal Fire’s defensible space guidelines using a defensible space zone approach to the extent possible given management and ownership limitations.</p>		
<p><b>2023 Approach:</b> Staff will:</p> <ul style="list-style-type: none"> <li>• Map the defensible space zones for each COTP communication site identified as wildfire-vulnerable;</li> <li>• Identify ownership and management responsibilities for these sites and their projected zones; and</li> <li>• Reach out to affected owners and/or managers to collaboratively plan the approach for creating and maintaining defensible space, the associated benefits, and potential impacts.</li> </ul>		
<p><b>2023 Progress:</b> WAPA completed desktop reviews and field visits to all COTP communications sites. The inset table below summarizes the findings. It is possible to reduce fuels and fire-harden these microwave sites by applying herbicide out to a distance of 30 feet from the sites’ perimeters if allowed by landowners, and then removing or thinning brush and trees out to a distance of 100 feet.</p>		
Facility	Owner	Site Conditions
Bear Springs	Sierra Pacific Industries	Moderate brush out to 100 feet.
Big Valley	Private	Grass out to 100 feet with dispersed brush.
Happy Camp	Modoc USFS	Light brush/grass south & west to 100 feet; moderate brush 25 to 100 feet north & east.
Hooker Creek	Private	Grass out to 100 feet with 5-6 trees dispersed.
Howard Ranch	Private	Grass/bare ground out to 50 feet; sparse orchard out to 100 feet.
Manzanita Lake	Lassen USFS	Grass/bare ground out to 100 feet, southwest corner is adjacent to another facility.
OSA	Private	Grass or bare ground out to 30 feet; sparse brush out to 100 feet.
Timber Mt.	Modoc USFS	Grass or bare ground out to 30 feet; sparse brush out to 100 feet.
Sites	Private	Grass out to 100 feet.
Widow Mt.	BLM	Moderate brush out to 100 feet.
<p><b>2024 Approach:</b> The next steps will be the development of work specifications and maps for each site, and eventually negotiating with potentially affected land managers to perform additional fuel mitigation work.</p>		
<p><b>2024 Progress:</b> Work specifications and maps have been completed for each of the ten communications sites listed above. They have been approved for sharing with potentially affected landowners.</p>		
<p><b>2025 Approach:</b> WAPA will submit work specifications and maps to potentially affected land managers for their review. Those contractor work specifications and maps may change based on 2025 land manager negotiations. WAPA will then modify and finalize work specification documents based on those negotiations. This approach is</p>		

**Figure V-6. Wildfire Strategy 21 - Microwave Sites Defensible Space**

<b>Category:</b> Communication Site Inspections	<b>Frequency:</b>
<b>HFTD Tier(s):</b> All	<b>Location:</b> In ROW; Outside ROW; Communication Site
intended to support the selection of a vegetation management contractor to perform the work in 2026.	
<b>2025 Progress:</b>	
<b>Wildfire Risk Reduction Lessons Learned:</b>	

**C. TANC’s Established Wildfire Prevention, Mitigation, and Response Strategies**

The Project has been operated and maintained since energization in 1993 to maintain safety, reliability, resiliency and, among other things, to address three key considerations:

1. The potential for an outage of the COTP;
2. The potential for an ignition that could cause a wildfire; and
3. The need to rapidly and effectively respond to such an ignition to limit its spread and consequent damages to the transmission line, its ROW, and other potentially affected lives, property, and resources.

TANC’s current, established operations and maintenance, vegetation and fuels management, and access road maintenance programs have been developed and refined in response to these three considerations. These activities form a strong foundation for maintaining Project reliability and reducing wildfire risks. They are complemented by ongoing fire response, fuels management, and access road activities funded through agreements with the USFS.

**1. Operations and Maintenance Inspections and Activities**

**a. Tower and Equipment Inspections**

**i) Inspection Program Foundation**

COTP tower and equipment maintenance inspections have been developed to maintain or improve upon the design criteria used for the Project. Development of the design criteria for the COTP was based on the requirements of GO 95 and the National Electrical Safety Code. Project design and construction relied on available weather and climatic data to calculate the climatic extremes and variabilities that would need to be withstood for the Project to operate properly. The key weather and climatic variables included ice build-up, wind speeds and temperature. Among a complex set of engineering considerations, conductor stringing also needed to comply with minimal horizontal and lateral clearance distances from the ground surface, certain crossings, and structures located near the ROW. COTP substation and communication site inspections focus on reliability and preventative maintenance.

On behalf of and under delegated contract to TANC, WAPA conducts the following aerial and ground transmission line structure and equipment inspections:

- Semi-annual aerial line patrols with intermediate patrols as needed. Patrol crews look for encroachments, new developments that may interfere with maintenance activities, and tower, conductor and hardware conditions.
- An aerial LiDAR patrol is performed typically every five years, with specific frequency being informed by a number of factors, including field conditions and regulatory requirements. LiDAR provides clearances between equipment and information on other items such as trees and structures.
- Maintenance crews conduct annual ground line patrols; scheduled year- round. Conditions are noted and scheduled for repair.
- Twenty (20) percent of all tower structures are subject to an annual detailed ground inspection. Every 5<sup>th</sup> tower is thoroughly inspected annually by the line crew which results in every COTP tower being ground-detailed-inspected every five years. A close visual inspection of the tower is conducted. Crews look for any loose steel, bolts on-the-ground or any other aberrant condition. Towers are climbed as necessary to identify and schedule repairs.
- As a good utility practice, ground patrols are deployed to investigate line outages.

#### ii) 2022 Inspection Program Additions

The following tower and equipment activities were added in 2022 based on lessons learned from 2020 through 2022. These activities have become established to augment and strengthen the program foundation.

- *Additional Maintenance Patrolman:* WAPA added one additional maintenance patrolman in 2019. Performance was monitored from 2020 through 2022. The patrolman is dedicated to conduct transmission line ROW inspections and is responsible for observing and accurately reporting ROW conditions on all patrols to include but not be limited to danger trees, brush, and fire hazards and any other unsafe or damaged equipment. The added patrolman supports all of the line, structure, equipment, and vegetation inspections within and adjacent to the COTP ROW. This position has been integrated into all COTP ROW inspection programs on an ongoing basis.
- *Infrared and Corona Inspection Contracts:* Multi-year infrared (IR) and Corona inspection contracts for the COTP were negotiated and executed from 2020 through 2022. These contracts will ensure a reliable base of resources capable of augmenting existing inspection capabilities. Specialized IR and ultraviolet/Corona cameras are either hand-held or mounted to helicopters, the COTP ROW flown, and imagery then captured. Special imagery attention is paid to splices, conductor connection and attachment points and insulators. The IR scan detects temperature differences and heat signatures of components, which may indicate problems (not visible to the naked eye) that could result in component or conductor failure. The Corona scan detects the degree of electric discharge or 'leakage' due to the ionization of air surrounding high-voltage electric components, which, if substantial enough, could result in an arc flash or mechanical component failure. In addition, a high-definition camera takes pictures of anomalies found for review. A corrective action plan is developed for anomalies and integrated with any identified repair or replacement needs.
- *Detailed Tier 2 and Tier 3 Inspections:* Detailed aerial, climbing, and/or ground-based tower and equipment inspections were conducted in HFTD Tiers 2 and 3 from 2020 through 2022.

These inspections have been integrated seamlessly into long-term established inspection programs and can usually be completed no later than June 30 of every year barring unforeseen circumstances.

- *Unmanned Aerial Vehicle (UAV) Inspection Program:* WAPA evaluated the feasibility of using Unmanned Aerial Vehicle (UAV or Drone) inspections of the COTP from 2020 through 2022. The evaluation and monitoring focused on research into the use of drones for inspections of all COTP, facilities, assets, equipment, and the ROW. It was found that drones offered several potential inspection capacity improvements that have been integrated into established inspection programs. UAVs are capable of close-order aerial inspections of transmission towers and conductors, communication sites, and existing and potential ROW encroachments. Drones can also provide more precise, repeatable data based on Geographic Positioning System (GPS) coordinates. The use of UAVs may also provide the opportunity to improve the accuracy and frequency of inspections and resulting records and reduce potential safety hazards conventionally associated with transmission line climbing inspections. The addition of one more maintenance patrolman accelerated the development of a UAV inspection program. WAPA also trained and licensed three additional UAV pilots in 2022, with additional recruitment planned in the future. WAPA will move forward with expanding the UAV program to include additional drones and train candidates as UAV pilots become licensed.

TANC and WAPA will continue to research ways to supplement or improve on the current available mapping resources with the use of new technologies or wildfire risk mitigation services, including but not limited to information, tools, and resources that are available through the Wildfire Forecast & Threat Intelligence Center and other developing risk modeling applications. We will continue to explore opportunities to participate in demonstrations and initiate pilot projects that use these new tools to reduce wildfire risks associated with the COTP.

#### **b. Substations Inspections**

Inspection activities associated with substation maintenance at Olinda Substation, Maxwell Compensation Station, and Tracy Substation expansion include:

- Perform monthly substation inspections at Olinda, Tracy, and Maxwell.
- Perform annual infrared survey of substation equipment.
- Conduct facility and site security inspections and assessments at the Olinda, Maxwell, and Tracy stations in accordance Critical Infrastructure Protection requirements.

#### **c. Communication Sites Inspections**

Communication site maintenance inspections include, but are not limited to:

- Performing semi-annual site inspections.
- Inspecting, adjusting, cleaning, and repairing communication equipment, batteries and chargers, antenna towers and wave guides, and auxiliary power supplies, as needed.
- Repeater site inspection, adjustment, and cleaning, and repair of station service- related equipment, including the building, batteries and charger, heaters and air conditioners, antenna towers and waveguides, and auxiliary power supplies, as needed including weed control, fence and gate, etc.

## 2. Vegetation, Fuels Management, and Access Road Maintenance Inspections and Activities

### a. ROW Vegetation Management Inspections

#### i) Inspection Program Foundation

TANC uses inspection and recordkeeping tools that integrate existing GIS and computer maintenance management system databases in support of the following inspections.

- Line vegetation management inspections are conducted annually with no more than 18 calendar months between inspections.
- Aerial patrols are typically flown quarterly and can be scheduled to capture changes in ground conditions, a full season of vegetative growth and flight visibility.
- Ground patrols are conducted annually and can be scheduled to consider access restrictions, fuel hazards and winter conditions.
- Inspections may also be conducted more frequently if site conditions such as vegetation growth warrant them to prevent an encroachment.
- Utility arborists and registered professional foresters monitor COTP ROW conditions year-round.

#### ii) 2022 Inspection Program Additions

From 2020 through 2022, TANC and WAPA evaluated the use of four separate types of aerial imagery for their individual and mutually complementary capabilities in improving vegetation management inspections within and adjacent to the COTP ROW. These included:

- LiDAR surveys covering the entire COTP ROW and an additional 300-foot-wide lateral buffer;
- Aerial photography and streaming video of the 200-foot wide COTP ROW and a 50-foot wide lateral, adjacent buffer zone on either side of the ROW edges for a total width of 300-feet of photographic coverage; and
- A one-mile-wide-path of ortho-rectified photography extending along the COTP ROW.

LiDAR, Oblique photography, Ortho-rectified photography and high-definition video are of limited value, with each type of imagery providing some initial information on areas with potential ROW encroachments and/or hazards. Regardless of these initial values, utility arborists and line patrolmen still need to visit all of those areas and sites to confirm access, slope and soil stability, terrain, and other conditions on-the-ground.

Based on these lessons learned, TANC and WAPA have adopted a general vegetative fuel reduction and fall-in hazard tree abatement strategy for the COTP using all available tools. This “all available tools” strategy is not tied to any specific inspection or remote sensing tool. It instead uses each and all of these tools—individually and in combination as applicable—to reduce vegetation-related wildfire risks on a case-by-case, site specific basis. From 2023 forward, We will continue to focus on identifying in ROW and off-ROW issues using all available data. We will shift to using photo-imagery to preliminarily identify areas of heavy vegetation and excessive fuel for planning and completing fuel reduction work followed by site visits to verify conditions on-the-ground. We will continue to use LiDAR and conventional aerial, ground and supporting inspection-related data to plan and prioritize wildfire risk reduction work.

From 2023 forward, priorities will again be in ROW fuel reduction through tower base clearing and ROW mastication, and off-ROW hazard tree mitigation. Off-ROW fuel reduction efforts will be developed as opportunities arise through collaboration and partnerships with other agencies and/or landowners and managers.

**b. Vegetation Management Within the COTP ROW**

TANC has a well-established integrated vegetation management program for managing vegetation within the COTP ROW that relies upon annual identification of danger trees and hazard trees<sup>6</sup> that could either grow or fall into COTP conductors, and potentially hazardous fuels accumulations. Identified trees are either removed or trimmed on a prioritized basis to Minimum Vegetative Clearance Distances consistent with the most current version of NERC Standard FAC-003-4 for Transmission Vegetation Management. Fuels are maintained to a low-growing status.

Routine assessments are used to evaluate site conditions and determine the extent of work needed, treatment method, priority, schedule and re-treatment interval. Some of the factors that may influence prescriptive treatment decisions are:

- Safety;
- Line voltage (which determines conductor clearances);
- Treatment objective;
- Type and density of vegetation - target and non-target species;
- Expected growth rates;
- Size of treatment area;
- Anticipated costs and equipment limitations;
- Effectiveness of possible treatments;
- Landowner or land managing agency;
- Contractual rights;
- Accessibility;
- Climate/meteorological conditions at time of treatment;
- Herbicide use regulations;
- Site conditions – soils, slope, and drainage; and
- Presence of sensitive species and/or sensitive cultural resources.

Based on these assessments, all of the vegetation management work planned for the year is inventoried for:

- The location of work;
- Landowner restrictions;
- Clearance distances; and
- Current work status.

All vegetation work is tracked in databases supporting maintenance and vegetation management work activities. The work is only considered complete when verified on-the-ground. All contractors are required to follow strict fire safety precautions that include work site fire

---

<sup>6</sup> Hazard trees and danger trees are defined in American National Standards Institute (ANSI) standards (ANSI 300 Part 7). A danger tree is any tree on or off the right of way that could contact electric supply lines. A hazard tree is a structurally unsound tree that could strike electric supply lines when it fails.

requirements, water supply for firefighting, engines equipped with spark arrestors, and supporting communications, equipment, and fire prevention and mitigation related instructions. Contractors also follow all appropriate fire restrictions on USFS lands, and fully comply with USFS fire plans for construction and service contracts.

The process of communicating an imminent vegetation-related threat is based on established guidelines. Those guidelines require the reporting of all electrical events, including imminent threats, to the WAPA Transmission Switching and Operations Dispatcher, who has the authority to direct field personnel and contracted crews during emergencies. Any situation identified as an imminent threat is mitigated as soon as possible, regardless of land ownership, access, environmental issues, or any other work constraints.

Orchard trees grow rapidly and represent potential vegetation to conductor risks that could ignite a wildfire. The orchard removal and land rights acquisition program is focused on removing existing orchards growing within the COTP ROW and preventing vegetation that could grow within required Minimum Vegetation Clearance Distances from conductors. This program compensates orchard owners for foregone crop revenues in exchange for the removal of existing orchards and placing future limitations of the rights of landowners to grow crops above a 12-foot height limit. Other rights that further reduce wildfire and related liability risks are also incorporated into the upgraded easement rights.

#### **c. Vegetation Management Outside the ROW**

TANC and WAPA also inspect and manage for danger and hazard trees located outside of the COTP ROW. Trees are identified for removal by utility arborists and/or registered professional foresters. Rights of entry and the terms and conditions associated with the cutting and removal and/or disposition of danger and hazard trees is agreed-upon with the potentially affected landowners. This program is scheduled as needed based on the proximity of trees to the edges of the ROW, growth rates, and utility arborist field observations.

#### **d. COTP Access Road Inspections and Maintenance**

##### **i) Program Foundation**

The COTP Access Road Maintenance Program is an ongoing program that identifies access roads requiring erosion and drainage control and other improvements to ensure that maintenance crews always have access to the COTP ROW. Access road maintenance activities are conducted on a routine or emergency/as needed basis to ensure that heavy equipment and wider and heavier-track transport vehicles also have access as needed for maintenance and repair of the COTP towers and conductors. This level of access also maintains and improves fire response capabilities for fire engines and crews that may be needed to respond to wildfires.

##### **ii) Annual HFTD Tier 2 and Tier 3 Road Brushing**

From 2020 through 2022, TANC and WAPA evaluated our ability to integrate the brushing and grading of approximately six miles of COTP access roads in HFTD Tier 3. Although landowner concerns, permitting, and inaccessibility remain as obstacles to increased mileage being completed expeditiously, brushing and grading five to six miles of HFTD Tier 2 and/or Tier 3 access roads can be completed annually using WAPA resources.

**e. Communication Site Defensible Space Activities**

COTP communication sites located in rural and forested areas may be surrounded by thick tree and shrub growth. This growth represents a risk to wildfire response activities and may prevent adequate wildfire defense resources from accessing the site. These activities are directed towards the development of adequate defensible space surrounding forested communications sites. TANC is working with the underlying landowners and other tenants at these sites to implement forest thinning, fuels management, access road maintenance, and other best practices to achieve long-term site defensible space.

**f. TANC-USFS Collaborative Fuels Treatments**

The COTP ROW crosses 58 miles of National Forest System lands that include the Lassen, Modoc, and Shasta-Trinity National Forests. TANC and the USFS jointly collaborate on fuels treatment and shared access road maintenance work in an area of northeastern California where the COI lines are parallel and in close proximity. The COI is a corridor of three roughly parallel 500 kV alternating current power lines connecting the electric grids of Oregon and California. Their combined power transmission capacity is 4,800 MW. The goal of these joint activities is to maintain electric transmission system reliability by: 1) Sufficiently reducing the fuel loads between the lines to eliminate the potential for a forest fire-caused simultaneous outage of all three 500 kV transmission lines; and 2) Ensuring prompt and correct action in the event an accidental fire should occur. These objectives are met through the use of management practices designed to create low fuel hazard conditions between the COTP and the other COI lines.

**g. TANC-USFS Collaborative Access Road Maintenance and Improvement**

TANC and the USFS annually develop a list of priorities for shared road maintenance activities based on the need to reduce the wildfire risks to the COTP and other COI lines, including improved access and staging. These activities are implemented near the COTP or other COI rights of way where fire response to the transmission infrastructure is important.

**3. Wildfire Response Capabilities-TANC-Funded Fire Station**

TANC annually provides funds for a fire station (Long Bell Fire Station), engine, and firefighters in the Modoc National Forest in northeastern California where the COI lines run near one another. The Long Bell Fire Station includes a garage for housing fire engines, an office and barracks. The engine is staffed with five wildland firefighters. Standard Operating Procedure requires that an engine be assigned to Long Bell or “on order” throughout the fire season, generally May through late November. This ensures a rapid response to fires occurring near the COTP and other COI lines. The Long Bell Fire Station is staffed throughout the fire season with USFS personnel.

## **VI. WILDFIRE-RELATED COMMUNICATIONS PROTOCOLS REGARDING COTP DEENERGIZATION, RECLOSER DISABLING AND SERVICE RESTORATION**

### **A. Introduction**

This Section discusses TANC communications protocols regarding COTP deenergization, recloser disabling and service. These protocols have been developed for two scenarios that include:

1. the threat of an imminent wildfire that may be advancing on the COTP ROW; or
2. high fire threat weather conditions (e.g., sustained high-speed winds, high temperatures, low humidity, etc.) that may necessitate COTP deenergization.

WAPA Operations staff uses a combination of tools to assess and keep track of fire and weather events that could impact system reliability. They can quickly view and determine the distance and threat to the TANC/WAPA transmission system. The following is an overview of some of these resources:

- **Fire Mappers** – GIS-based mapping system with incident data and live feeds of current wildfire events. Operations can see location of any new fires, receive real-time information from participating wildfire systems, including federal, state, and local agencies, view estimated burned areas, and hot spot detection.
- **AlertCalifornia and AlertWildfire** – Network of cameras that offer visual coverage of TANC/WAPA infrastructure and their proximity to active fires.
- **Ventusky and Zoom Earth** – Web-based weather apps that provide real-time weather event information, including wind, precipitation, smoke and more.

Protocols for disabling reclosers are summarized first, followed by protocols for deenergizing BES elements. The COTP is a BES element. This Section also includes a discussion of the public safety communications responsibilities as they relate to a potential COTP deenergization.

### **B. Protocols for Disabling Reclosers Under Imminent Fire and/or Smoke Threat Conditions**

#### **1. Recloser Disabling**

- Upon notification of an imminent fire and/or smoke threat to an element of the BES - including the COTP, COTP reclosers will be turned off for safety of personnel and the possibility of fire ignition.

#### **2. Enabling Reclosers After Threat De-escalation**

- Upon the de-escalation of fire and/or smoke threat activity, reclosers will be restored to their original states.

### **C. Protocols for Disabling Reclosers Pre-emptively Based on High Fire Threat Weather Activity**

#### **1. Recloser Disabling**

The decision to preemptively disable reclosers prior to a high fire threat weather event requires consideration of many complexities both known and unknown. Disabling reclosers is therefore ultimately based on the following considerations:

- Red Flag Warnings issued by the National Weather Service for fire weather zones containing the COTP in the HFTD;
- Ongoing fire activity throughout the service territory and California in general;

- Assessments of known local conditions, including wind speeds (sustained and gusts), humidity and temperature, fuel moisture and fuel loading;
- Input from real-time observations from vegetation management personnel or field craftsmen as appropriate; and
- Line/load criticality assessments.

## 2. Enabling Reclosers After Pre-emptive Disabling

Upon de-escalation of high fire threat weather activity, reclosers will be returned to their normal states for affected BES elements.

## **D. Protocols for Deenergization Under Imminent Fire and/or Smoke Threat Conditions**

### 1. Deenergization

Upon an immediate fire and/or smoke threat to the COTP, deenergization will occur following sound utility practice.

### 2. Service Restoration or Reenergization

Upon de-escalation of fire and/or smoke activity and when safe to energize the COTP will be returned to service.

## **E. Protocols for Pre-emptive Deenergization Based on High Fire Threat Weather Activity**

### 1. Deenergization

The decision to preemptively deenergize BES element(s) prior to a high fire threat weather activity and events requires consideration of many complexities both known and unknown. Deenergization is therefore ultimately based on the following considerations:

- Red Flag Warnings issued by the National Weather Service for fire weather zones containing the COTP in the HFTD;
- Assessments of known local conditions, including wind speeds (sustained and gusts), humidity and temperature, fuel moisture and fuel loading;
- Real-time situational awareness information from personnel positioned in high fire threat areas identified as potentially at risk, areas located near circuits identified for inclusion on the circuit monitoring list, and in other areas identified during the incident as at risk of being subject to extreme weather conditions;
- Ongoing fire activity throughout the service territory and California in general;
- Input from real-time observations from vegetation management personnel or field craftsmen as appropriate;
- Potential impacts to customers and communities;
- Input from local and state fire authorities with specific concerns regarding the potential consequences of wildfires in select locations;
- Real-time system studies and expected impact of deenergizing circuits on the BES and essential services;
- Awareness of mandatory or voluntary evacuation orders in place;
- Ongoing notifications to local agencies and officials; and
- Line/load criticality assessments.

## 2. Service Restoration or Reenergization

Upon de-escalation of high fire threat weather activity, the COTP will be returned to service following sound utility practices.

### **F. Public Safety Communications Responsibilities**

TANC does not have an electric service territory or serve end-use electric customers. TANC provides wholesale transmission service to its member electric utilities and other companies that purchase transmission capacity on the COTP. During a public safety power shutoff, as a result of a deenergization of the COTP, TANC will use existing and well-established operating and communications procedures to notify entities that are utilizing the COTP. The existing operating procedures provide a framework for communicating with entities that are directly utilizing the COTP, so that those entities can make the necessary accommodations to minimize the impact to any end-use electric customers that may be affected due the public safety power shutoff. In many instances, a public safety power shutoff or deenergization of the COTP may not result in any service interruption to end-use electric customers. However, to the extent that end-use electric customers may be adversely impacted due to a public safety power shutoff of the COTP, the entities utilizing the COTP that have end-use electric customers are responsible for notifying their respective customers of potential electric service interruption and restoration activities.

## VII. PLAN EVALUATION AND METRICS

### Introduction

This Section presents the process TANC is using to evaluate the effectiveness of this Plan, including descriptions of:

- A review of how TANC and WAPA monitor and audit the effectiveness of transmission line and equipment inspections;
- A discussion of how the application of previously identified metrics have informed this Plan;
- The metrics that are being used to measure the effectiveness of Wildfire Strategies in reducing wildfire ignition and spread risks and their contributing risk drivers;
- The process for annually monitoring progress achieved for Wildfire Strategies and auditing the 2020 through 2022 implementation of this Plan;
- Activities to annually evaluate the effectiveness of COTP structure and equipment inspections and other Wildfire Strategies; and
- Methods for identifying and correcting any Plan deficiencies as part of this comprehensive Plan revision.

#### A. Monitoring and Auditing Transmission Line and Equipment Inspections Effectiveness

WAPA, on behalf of and under contract to TANC for operations and maintenance of the COTP, actively and continuously monitors and audits the effectiveness of the COTP transmission line, equipment, and associated facilities inspections. Effectiveness is generally defined as fully supporting the RCM approach that emphasizes preventative maintenance. The three primary elements of these activities include:

1. Inspections conducted by qualified electrical workers;
2. Multiple inspection resources, methods, and frequencies; and
3. The use of advanced inspection data collection, reporting, and management platforms and practices.

Each of these elements are summarized below.

##### 1. Qualified Inspectors

COTP facility and equipment inspections are conducted by qualified electrical workers and linemen who have undergone rigorous apprenticeships, education and training for inspecting, repairing, and maintaining high-voltage transmission towers, conductors, and all associated equipment and facilities. This is a key first step in ensuring that these inspections are conducted by professionals who understand how to inspect the COTP, what to look for with respect to potential preventative maintenance issues, and how to appropriately document and prioritize those issues.

##### 2. Multiple Inspection Resources, Methods, and Frequencies

WAPA conducts multiple facility and equipment inspection methods on the COTP. Each of these inspections is intended to provide a unique and important means of detecting potential maintenance needs. These include longstanding routine inspections that have been conducted since the construction and energization of the COTP in 1993, and those enhanced inspections that were evaluated from 2020 through 2022 that have been integrated into our established inspections program.

### **a. Longstanding Routine Inspections**

As discussed in Section V, above, three facility and inspection methods have been conducted on the COTP since 1993. These include:

- Semi-annual aerial line patrols with intermediate patrols as needed;
- An aerial LiDAR patrol is performed typically every five years; and
- Annual ground line patrols; scheduled year- round; twenty (20) percent of all tower structures are subject to an annual detailed ground inspection.

### **b. Enhanced Inspections and Resources Added in 2022**

Seven of the 15 Wildfire Strategies evaluated in this Plan from 2020 through 2022 provided additional facility and equipment inspections methods, resources, and frequencies. These COTP wildfire risk reduction program additions allow WAPA to use one inspection method to “cross-check” and verify the reliability of the data resulting from one or more *other* types of inspections to confirm and/or verify identified maintenance needs and priorities. These cross-checking and verification activities are essential to monitoring the effectiveness of inspection programs by comparing the results from one inspection to the results of another. Each of these inspection program additions are briefly summarized below with examples of how they provide inspection effectiveness capacity improvements and inspection program verification “cross-checks” within the broader facility and equipment inspection program.

#### **i) Adding One Dedicated Maintenance Patrolman:**

Adding one dedicated maintenance patrolman increased the number of facility and equipment inspections and provided an additional resource supporting infrared, Corona, and UAV inspection programs.

#### **ii) Multi-Year Infrared and Corona Inspection Contracts with Oblique Photography and High-Definition Video**

These infrared, corona, oblique photography and video imagery contracts augment existing inspection capabilities. Infrared and Corona scans detect temperature differences and heat signatures of components not visible to the naked eye, thereby cross-checking and reinforcing visual inspections. High-definition cameras photograph anomalies for further review, which improves inspection data quality.

#### **iii) Acquisition of Aerial Mounted Infrared, Oblique Photography, High-definition Video and/or Corona Camera Inspection Equipment**

The addition of WAPA-owned inspection equipment allows the conduct of inspections using photography, video, and Corona methods on an as-needed basis by WAPA maintenance staff. This increases facility and equipment inspections’ effectiveness by allowing flexible inspection schedules, locations, and frequencies that can complement contract inspections that are on pre-established schedules.

#### **iv) Detailed Aerial, Climbing and/or Ground-based Tower and Equipment Inspections in HFTD Tiers 2 and 3**

Inspections focused in HFTD Tiers 2 and 3 increase the number and frequency of facility and equipment inspections which increase the effectiveness of the overall COTP inspection program.

#### v) **Drone (UAV) Inspection Program**

UAVs are capable of close-order aerial inspections of transmission towers and conductors, communication sites, and existing and potential ROW encroachments. Drones can also provide more precise, repeatable data based on Geographic Positioning System (GPS) coordinates. The use of UAVs may also provide the opportunity to improve the accuracy and frequency of inspections and resulting records and reduce potential safety hazards conventionally associated with transmission line climbing inspections.

#### vi) **Oblique Photography and High-Definition Video**

WAPA uses all available photo-imagery data to supplement aerial and ground inspection data to help identify additional hazard trees that may not be easily identifiable due to terrain, ground access, or other limiting factors. This information was especially useful in approximately 10 miles along the Captain Jack – Olinda transmission line segment as an important means of cross-checking imagery-generated data with ground-verification.

In summary, the use of longstanding and new facility and equipment inspection resources, methods, and technologies on more flexible schedules supports an inspection program that effectively self-monitors its own effectiveness. This is achieved through the use of variable inspection types to cross-check and verify their maintenance data with that collected using other inspection methods on the same COTP assets.

### **3. Advanced Inspection Data Collection, Reporting, and Management Platforms and Practices**

COTP facility and equipment inspections are audited by WAPA on an ongoing basis through the use of advanced inspection data collection, reporting, and management. This real-time auditing is generally based on the use of these tools for effectively supporting the RCM approach and timely, well-planned and prioritized preventative maintenance. The foundation for WAPA's use of the advanced inspection data collection, reporting, and management platforms and practices is strict adherence to guidelines, standards, business rules and maintenance priorities integrated in a comprehensive inspection data collection, quality assurance, reporting, and recordkeeping system that is summarized in Section IV. WAPA applies best data practices by using a reporting system that verifies that planned maintenance is accomplished on time, reported accurately, and rescheduled as appropriate.

Asset records are set up in WAPA's computerized maintenance database. Preventive maintenance (PM) records are set up against those asset records. The maintenance and testing tasks defined in job plans are then "linked" to the appropriate PM records, so that the appropriate maintenance tasks are accomplished at the right time. The PM records have the last completion dates and the next due dates. Work orders are created from the PM records to schedule the maintenance. When the maintenance has been accomplished, the work order status is changed to "completed" and the completed date is reflected in the PM record. The PM next due date is automatically calculated based on the work order completed date (or the work order target start date depending on how the PM is set up) and the PM frequency.

The computerized database — IQGeo — is a reporting tool that provides reports to WASN maintenance staff monthly. This assists them in tracking maintenance which has been accomplished and work orders that are due.

All PM work orders must be completed by the last day of the month they are due. All PM work orders generated for the year are updated with the month and year they are due and this text is added to the end of the work order description. This helps for better tracking throughout the year. At the beginning of every month a report is run to show remaining work orders due for the year which is emailed to WAPA management and maintenance personnel for visibility. Work orders that are due during the month are checked on the 3rd Monday of the month. If there are still work orders due, an email will be sent to the responsible parties with a list of remaining work orders as a reminder and this continues until all work orders are completed for the month.

## **B. Metrics for Evaluating Plan Performance**

### **1. How Previously Identified Metrics Have Informed this Plan**

TANC's established wildfire risk reduction programs and activities described in Section V have informed the development of several Plan metrics. COTP equipment inspections use a complex set of risk-related metrics that allow repairs to be prioritized according to potential probabilities of failure and associated consequences. Transmission vegetation management metrics required for compliance with NERC Standard FAC-003-4 have informed metrics that will be used in this Plan to focus on reducing vegetation-to-wire contact hazard tree risks in HFTDs. Metrics associated with the acres of fuels treated by the USFS near the COI lines in northeastern California have and will continue to inform the timing and location of fuels treatments designed to reduce wildfire ignition and spread rates, and metrics used in this Plan.

### **2. Metrics Being Used to Evaluate This Plan**

Section 8387(b)(2) of the PUC includes the following requirements for POU WMPs:

*The WMP shall consider as necessary, at minimum, all of the following:*

*(D) A description of the metrics the local publicly owned electric utility or electrical cooperative plans to use to evaluate the WMP's performance and the assumptions that underlie the use of those metrics.*

TANC uses quantitative metrics that are results oriented and focused on the success of Wildfire Strategies at reducing the risk of catastrophic wildfires. Data collected through facility, equipment, and vegetation management related inspections is input directly into WAPA's database that prioritizes maintenance activities on an ongoing basis.

Table VII-1 lists the 11 metrics that are being used to measure outcomes for this Plan within the context of its risk assessment framework. It includes the wildfire risk event and drivers, the corresponding annual metrics, and how those metrics are intended to focus on outcomes that directly reduce wildfire risk events and/or drivers. It indicates that some metrics will provide insights regarding the effectiveness of maintenance and vegetation management inspections. It also provides insights and trends where additional situational awareness may be needed with respect to local meteorological conditions, security, or other mitigation or response strategies, and addresses continuous fire safety training as needed.

## **C. Monitoring and Auditing of Plan Implementation**

Section 8387(b)(2) of the California Public Utilities Code also includes the following requirements for POU WMPs:

*(N) A description of the processes and procedures the local publicly owned electric utility or electrical cooperative shall use to do all of the following:*

- (i) Monitor and audit the implementation of the WMP.
- (ii) Identify any deficiencies in the WMP or its implementation and correct those deficiencies.
- (iii) Monitor and audit the effectiveness of electrical line and equipment inspections, including inspections performed by contractors, that are carried out under the plan, other applicable statutes, or commission rules.

This Section describes the process that TANC uses to monitor and audit the effectiveness of Plan implementation. Monitoring and auditing are ongoing annual processes. This Section also describes the process that we used to prepare the 2023 comprehensive revision of the Plan based on lessons learned from 2020 through 2022. The comprehensive revision process was used to evaluate the effectiveness of line, equipment, and vegetation management inspections conducted over the past three years. Further, each of the 15 Wildfire Strategies evaluated from 2020 through 2022 were monitored and audited for their importance in reducing wildfire ignition and spread risks. The comprehensive revision process allowed the identification of deficiencies or improvements in this Plan and supported the development of the six Wildfire Strategies to be evaluated from 2023 through 2025 presented in Figures V-1 through V-6.

**Table VII-1. Metrics for Evaluating the TANC-COTP WMP**

Wildfire Risk Event & Drivers	Annual Metric	Outcomes/Effectiveness
Wildfires <sup>1</sup>	1. Number of COTP-ignited wildfires and cause(s).	Provides an overall indicator of Plan effectiveness.
<b>Equipment Failure</b>		
Downed Wire	2. Number of downed wires.	Provides insights regarding maintenance inspections effectiveness.
Wire to Wire Contact	3. Number of wire to wire contacts/faults.	Provides insights regarding conductor and equipment design, quality, and lifecycle expectancy.
Clamps, Conductors, Insulators, Splices, Spacer-Dampers, Towers, Substation, Communication Site, Other unspecified	4. Number of equipment failures by facility.	Provides insights regarding conductor and equipment design, quality, and lifecycle expectancy.
Weather-driven	5. Number of weather-driven faults and cause(s).	Identifies trends where additional local real-time weather data may be needed.
Vegetation-Caused Outages	6. Number of vegetation-caused outages and cause.	Provides insights regarding vegetation inspections effectiveness.
Hazard Trees Removed	7. Number of hazard trees identified and removed.	Reduces the number of potential vegetation to wire contacts; a direct measure of effectiveness.
Fuels Reductions	8. Acres of fuels treatments completed– within and outside of the COTP ROW.	Reduces the flammability of fuels subject to ignitions from equipment failures, thereby reducing potential wildfire spread rates.
Bird Strikes	9. Number of bird strike incidents and operational and/or maintenance impact(s).	Increases awareness of where additional bird-repulsion measures may be needed.

**Table VII-1. Metrics for Evaluating the TANC-COTP WMP**

Wildfire Risk Event & Drivers	Annual Metric	Outcomes/Effectiveness
<b>High Fire Threat Conditions</b>		
Local Weather & Meteorological Conditions	10. Date of each high fire threat day, and number of high fire threat days.	Allows daily correlation of weather and meteorological conditions with equipment failures. Allows daily correlation with conductor loading.
<b>Third Party Contact</b>		
Drone/Light Aircraft, Vandalism	11. Number of drone, light aircraft, or vandalism, incidents and operational and/or maintenance impact(s).	Increases awareness of where additional security measures may be needed.
1/A fire ignition is defined as follows: <ul style="list-style-type: none"> <li>• A COTP facility was associated with the ignition of a fire;</li> <li>• The fire was self-propagating and of a material other than electrical and/or communication facilities;</li> <li>• The resulting fire travelled greater than 100 feet from the ignition point; and</li> <li>• TANC had knowledge that the fire occurred.</li> </ul>		

### 3. Plan Monitoring

TANC monitors the implementation of this Plan using data collected through implementation of the Wildfire Strategies. On behalf of TANC, WAPA maintains an extensive maintenance database of all COTP operational incidents and asset maintenance inspections and repairs.

Operational incident information includes the date and time of the incident, its duration, incident weather conditions, identified cause, impact to the system, and comments pertaining to the incident investigation. Maintenance data includes:

- Information on the last date an inspection was completed and its findings;
- The status of repairs in progress or completed; and
- The next scheduled inspection.

TANC will categorize this information to support the metrics developed in Table VII-1. TANC will annually track each metric and correlate them with existing information on the type and frequency of maintenance and vegetation inspections. This tracking will provide insights regarding the effectiveness of those inspections, and future guidance on any adjustments to those inspections that may become apparent from the data collected. Other potential causal correlations between high fire threat conditions and/or districts, equipment failures, and other incidents may also be developed.

### 4. Plan Auditing

TANC will internally audit the effectiveness of Plan implementation using the management organization presented in Section III. Metrics data will be compiled and evaluated annually. The risk assessment framework, Wildfire Strategies, and metrics will be analyzed with respect to providing needed information. These annual compilation and evaluation activities are captured in the format and content of the Wildfire Strategies presented in Section V of this Plan. The annual updating of each Wildfire Strategy with a chronological accounting of the progress achieved and the subsequent years'

approach provide an ongoing and cumulative record of the lessons learned regarding each Wildfire Strategy's development and implementation. This record in turn supports a fully informed auditing of the Plan's effectiveness.

Under the supervision of the TANC General Manager, TANC and the COTP will then consider the data and review the effectiveness of the entire Plan. Based on this review, the Plan will be adjusted to increase its effectiveness. These adjustments may include, but not be limited to changes in the Wildfire Strategies and each Section of this Plan, as appropriate. Plan adjustments will be considered by the TANC Commission and the COTP Management Committee and reflected in subsequent versions of the Plan. It will also include any adjustments that are needed to identify and correct Plan deficiencies.

##### 5. 2023 Comprehensive Plan Revision

We monitored and audited the 15 Enhanced Wildfire Strategies evaluated from 2020 through 2022. Each of those strategies, and the annual approaches and progress achieved for the full three-year period are presented in Appendix A of the 2023 Comprehensive Revision of this Plan<sup>7</sup>. The progress achieved for each of those Wildfire Strategies was evaluated for their potential contributions to reducing TANC and COTP wildfire risks.

Table VII-2 summarizes the process used to evaluate the effectiveness of each of the 15 Wildfire Strategies evaluated from 2020 through 2022. Table VII-2 includes five columns, including:

*Column 1-Assigned Numbers for the 15 Wildfire Strategies:* Numbering was not included in the 2020 through 2022 versions of this Plan but was needed to support a well-organized evaluation as part of this comprehensive revision. The numbering matches the order of appearance of those Wildfire Strategies in Section V; Tables V-1 and V-2 of previous Plan versions.

*Column 2- Corresponding Wildfire Strategy Titles:* These are presented in their order of appearance in prior Plan versions.

*Column 3-Wildfire Risk Reduction Lessons Learned from 2020-2022 Plan Monitoring and Auditing:* Lessons learned document the wildfire risk reduction benefits, constraints, opportunities, and other issues and values associated with each of the Wildfire Strategies. These lessons learned are the basis for classifying each of the Wildfire Strategies from 2023 forward.

*Column 4-Metrics Informed or Improved from Plan Evaluation:* The 11 metrics presented in Table VII-1 were assigned numbers and added as a separate footer table on each page of Table VII-2. For each Wildfire Strategy, we then listed which metrics were either: 1) informed by the data collected during implementation of that strategy; or 2) improved in their application by the lessons learned from 2020 through 2022.

*Column 5-Strategy Classification from 2023 Forward:* Based on the lessons learned and the metrics' evaluation, each strategy was then classified in one of two ways:

- Six 'Completed' strategies were accomplished and provided valuable lessons learned.

---

<sup>7</sup> Documentation associated with assessing Wildfire Strategies 1 through 15 are included in the 2023 Comprehensive Revision version of this Plan as posted and available through the appropriate WSAB website and docket. They are not included in this 2024 update.

- The other nine strategies have been '*Added to TANC's Established Wildfire Prevention, Mitigation, and Response Strategies.*' Those additions have been integrated into Section V of this Plan under the headings titled "2022 Inspection Program Additions" and "Annual HFTD Tier 2 and Tier 3 Road Brushing."

**THE REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK**

**Table VII-2. 2020-2022 Evaluation of Wildfire Prevention, Mitigation, and Response Strategies 1-15 for Plan Effectiveness**

No.	Wildfire Strategy Title	Wildfire Risk Reduction Lessons Learned from 2020-2022 Monitoring and Auditing	Metrics Informed or Improved by Plan Evaluation	Wildfire Strategy Classification from 2023 Forward
1	Increased Personnel by Adding One Dedicated Maintenance Patrolman	<ul style="list-style-type: none"> <li>Increased direct visual inspection data quantity and quality</li> <li>Advanced infrared and Corona inspection capacity</li> <li>Assisted in UAV program development.</li> </ul>	1,2,3,4,6,7	Added to Established Program – Tower and Equipment Inspections; One Additional Maintenance Patrolman
2	Development of Long-Term Infrared, LiDAR, Oblique Photography, High-Definition Video and/or Corona Camera Inspection Service Contract	<ul style="list-style-type: none"> <li>Contracting increases efficiencies in procuring infrared and Corona inspection services and improving abnormal equipment heat signatures and electrical discharges, particularly at splices, conductor connections, and attachment points and insulators.</li> <li>Contracting for long-term oblique photography and high- definition video data is of limited, short-term value. [LiDAR lessons learned are discussed under Wildfire Strategy No. 9, below].</li> </ul>	1,2,3,4	Added to Established Program – Tower and Inspections; Infrared and Corona Inspection Services Contract
3	Acquisition of Aerial Mounted Infrared, Oblique Photography, High-Definition Video and/or Corona Camera Inspection Equipment	<ul style="list-style-type: none"> <li>WAPA equipment ownership provides opportunities for conducting work that is outside the scope of contracted services.</li> <li>Long-term interest in direct ownership is of interest to WAPA, but current internal operational skills result in less efficient data collection than more skilled contractors</li> </ul>	1,2,3,4	Completed
4	Detailed Aerial, Climbing and/or Ground-based Tower and Equipment Inspections	<ul style="list-style-type: none"> <li>HFTD Tier 2 and Tier 3 detailed tower and equipment inspections can be completed no later than June 30 of every year.</li> <li>Tier 2 and 3 segment inspections can be integrated seamlessly into long-term established inspection programs.</li> </ul>	1,2,3,4,9,11	Added to Established Program – Tower and Equipment Inspections; Detailed Tier 2 and Tier 3 Annual Inspections

No.	Annual Metric	No.	Annual Metric
1	Number of COTP-ignited wildfires and cause(s).	7	Number of hazard trees identified and removed.
2	Number of downed wires.	8	Acres of fuels treatments completed– within and outside of the COTP ROW.
3	Number of wire-to-wire contacts/faults.	9	Number of bird strike incidents and operational and/or maintenance impact(s).
4	Number of equipment failures by facility.	10	Date of each high fire threat day, and number of high fire threat days.
5	Number of weather-driven faults and cause(s).	11	Number of drone, light aircraft, or vandalism, incidents and operational/ maintenance impact(s).
6	Number of vegetation-caused outages and cause.		

**Table VII-2 2020-2022 Evaluation of Wildfire Prevention, Mitigation, and Response Strategies 1-15 for Plan Effectiveness**

No.	Wildfire Strategy Title	Wildfire Risk Reduction Lessons Learned from 2020-2022 Monitoring and Auditing	Metrics Informed or Improved by Plan Evaluation	Wildfire Strategy Classification from 2023 Forward
5	Brush and Grade Six Miles of COTP Access Roads	<ul style="list-style-type: none"> <li>Brushing and grading 5 to 6 miles of Tier 2 and/or Tier 3 access roads can be completed annually.</li> <li>Many access roads only need brushing; not annual grading or reconstruction.</li> </ul>	8	Added to Established Program – COTP Access Road Inspections and Maintenance; Road Brushing and Grading in Tiers 2 and 3
6	Hazard Tree Mitigation Based on Most Recent LiDAR Analysis	Please see Lessons Learned for Strategy No. 9, below to avoid redundancy in stating LiDAR lessons learned.	Please see Strategy No. 9, below.	Please see discussion under Strategy No. 9, below.
7	Brush and Fuels Control	<ul style="list-style-type: none"> <li>Post-completion contractor evaluations include assessment of acreage of fuels treatments completed</li> <li>Contractors' efficiencies can be assessed based on the type of equipment used, the experience of equipment operators and hand crews, road crew readiness and responsiveness in mobilizing and expending the work.</li> </ul>	8	Completed
8	Research and Development of Drone Use for Structural, Equipment, and Right of Way Inspections	<ul style="list-style-type: none"> <li>The addition of one additional maintenance patrolman under Wildfire Strategy No. 1 accelerated the development of a UAV inspection program.</li> <li>WAPA trained and licensed three additional UAV pilots in 2022, with additional recruitment planned from 2023 forward.</li> </ul>	1,2,3,4,6,7	Added to Established Program – Tower and Equipment Inspections; Drone Inspection Program

No.	Annual Metric	No.	Annual Metric
1	Number of COTP-ignited wildfires and cause(s).	7	Number of hazard trees identified and removed.
2	Number of downed wires.	8	Acres of fuels treatments completed– within and outside of the COTP ROW.
3	Number of wire-to-wire contacts/faults.	9	Number of bird strike incidents and operational and/or maintenance impact(s).
4	Number of equipment failures by facility.	10	Date of each high fire threat day, and number of high fire threat days.
5	Number of weather-driven faults and cause(s).	11	Number of drone, light aircraft, or vandalism, incidents and operational/ maintenance impact(s).
6	Number of vegetation-caused outages and cause.		

**Table VII-2. 2020-2022 Evaluation of Wildfire Prevention, Mitigation, and Response Strategies 1-15 for Plan Effectiveness**

No.	Wildfire Strategy Title	Wildfire Risk Reduction Lessons Learned from 2020-2022 Monitoring and Auditing	Metrics Informed or Improved by Plan Evaluation	Wildfire Strategy Classification from 2023 Forward
9	LiDAR Surveys of the COTP ROW and Adjacent Lateral Areas	<p>LiDAR was evaluated for its benefits in reducing vegetation-related wildfire risks within and outside of the COTP ROW, with the following lessons learned:</p> <p><b>In ROW Tree Hazards</b> - Continue using LiDAR to identify encroachment issues within the ROW. Current LiDAR inspection data has proven useful over the last three years in identifying potential grow-in and fall-in hazards</p> <p><b>In ROW Fuels</b> - Current LiDAR data set does not identify potential fire conditions and areas of greater risk. An effort will be made to use LiDAR data to map out areas along and adjacent to the COTP that represent wildfire risk. These can be based on the characterization of surface fuels and canopy structure and be used to estimate wildfire intensity, flame length and spread rate. Wildfire risk can be quantified and be used to prioritize mitigation activities.</p> <p><b>Off-ROW Tree Hazards</b> - LiDAR inspection of off-ROW conditions must be adjusted to distinguish between healthy trees and fall-in hazard trees. Current LiDAR data set identifies all trees that can strike but only trees that are dead, dying, diseased, or structurally unsound should be identified as a hazard and mitigated. Next set of LiDAR inspections will identify both in ROW and Off-ROW hazard trees.</p> <p><b>Off-ROW Fuels</b> - The same approach used for in ROW fuels mapping can be used for Off-ROW areas. These areas can be prioritized for collaborative efforts with adjacent property managers to reduce the risk for both TANC and neighbors.</p>	7,8	Added to Established Program – ROW Vegetation Management Inspections; LiDAR for Potential Off-ROW Encroachments

No.	Annual Metric	No.	Annual Metric
1	Number of COTP-ignited wildfires and cause(s).	7	Number of hazard trees identified and removed.
2	Number of downed wires.	8	Acres of fuels treatments completed– within and outside of the COTP ROW.
3	Number of wire-to-wire contacts/faults.	9	Number of bird strike incidents and operational and/or maintenance impact(s).
4	Number of equipment failures by facility.	10	Date of each high fire threat day, and number of high fire threat days.
5	Number of weather-driven faults and cause(s).	11	Number of drone, light aircraft, or vandalism, incidents and operational/ maintenance impact(s).
6	Number of vegetation-caused outages and cause.		

**Table VII-2. 2020-2022 Evaluation of Wildfire Prevention, Mitigation, and Response Strategies 1-15 for Plan Effectiveness**

No.	Wildfire Strategy Title	Wildfire Risk Reduction Lessons Learned from 2020-2022 Monitoring and Auditing	Metrics Informed or Improved by Plan Evaluation	Wildfire Strategy Classification from 2023 Forward
10	Oblique Photography and High-Definition Video	<ul style="list-style-type: none"> <li>Oblique photography and high-definition video are of limited initial value for prioritizing fuels treatments based on site inaccessibility and imagery resolution; ground-truthing is always needed for verification.</li> </ul>	8	Added to Established Program – Right of Way Vegetation Management Inspections; Optimize All Available Imagery and Applicable Data
11	Orthophotography	Please see lessons learned - Wildfire Strategy No. 10.	8	Added to Established Program – ROW Vegetation Management Inspections; Optimize All Available Imagery and Applicable Data
12	Expanded Collaboration with Other Public and Private Agencies	<ul style="list-style-type: none"> <li>The long-term collection agreements with the U.S. Forest service are established and successful for limiting wildfire ignitions and wildfire spread rates through aggressive annual fuel treatments, responsive fire suppression capabilities, and supporting wildfire readiness support activities.</li> <li>Expanded collaboration with non-federal agencies and landowners needs to be targeted for reducing higher-priority fuels accumulations.</li> </ul>	1,7,8	Completed
13	Technology Application Reviews	<ul style="list-style-type: none"> <li>Evaluation of new technologies such as satellite-based wildfire risk mitigation technologies, frequency harmonics and ultrasonic dish did not appear to significantly enhance our current abilities to detect potential issues that would justify their costs.</li> </ul>	None	Completed

No.	Annual Metric	No.	Annual Metric
1	Number of COTP-ignited wildfires and cause(s).	7	Number of hazard trees identified and removed.
2	Number of downed wires.	8	Acres of fuels treatments completed– within and outside of the COTP ROW.
3	Number of wire-to-wire contacts/faults.	9	Number of bird strike incidents and operational and/or maintenance impact(s).
4	Number of equipment failures by facility.	10	Date of each high fire threat day, and number of high fire threat days.
5	Number of weather-driven faults and cause(s).	11	Number of drone, light aircraft, or vandalism, incidents and operational/ maintenance impact(s).
6	Number of vegetation-caused outages and cause.		

**Table VII-2. 2020-2022 Evaluation of Wildfire Prevention, Mitigation, and Response Strategies 1-15 for Plan Effectiveness**

No.	Wildfire Strategy Title	Wildfire Risk Reduction Lessons Learned from 2020-2022 Monitoring and Auditing	Metrics Informed or Improved by Plan Evaluation	Wildfire Strategy Classification from 2023 Forward
14	Upgrade Ground and Aerial Line Inspection Software for More Refined Data and Analyses	<p>WAPA has upgraded its line inspection software to IQGeo.</p> <ul style="list-style-type: none"> <li>This database upgrade has made the collection of structure and equipment inspections data more holistic, more current by facilitating greater inspection efficiencies, and more flexible.</li> <li>IQGeo has strengthened the ability to preventatively detect equipment and facility stressors.</li> </ul>	1,2,3,4,5,9,10	Completed
15	Review Fire Safety Guidelines and Precautions	WAPA training focused on enhanced wildfire risk reduction skills has expanded to other WAPA regions, and increased region-wide tools and skills related to LiDAR analysis, UAV inspections, vegetation inspections, worker safety, lone worker precautions, and first aid.	1,2,3,4,6,7,8	Completed

No.	Annual Metric	No.	Annual Metric
1	Number of COTP-ignited wildfires and cause(s).	7	Number of hazard trees identified and removed.
2	Number of downed wires.	8	Acres of fuels treatments completed– within and outside of the COTP ROW.
3	Number of wire-to-wire contacts/faults.	9	Number of bird strike incidents and operational and/or maintenance impact(s).
4	Number of equipment failures by facility.	10	Date of each high fire threat day, and number of high fire threat days.
5	Number of weather-driven faults and cause(s).	11	Number of drone, light aircraft, or vandalism, incidents and operational/ maintenance impact(s).
6	Number of vegetation-caused outages and cause.		

## **D. Independent Evaluation and Agency Presentation and Comments**

### **1. Independent Evaluation**

PUC § 8387 (c) states that:

“The local publicly owned electric utility or electrical cooperative shall contract with a qualified independent evaluator with experience in assessing the safe operation of electrical infrastructure to review and assess the comprehensiveness of its WMP. The independent evaluator shall issue a report that shall be made available on the Internet Web site of the local publicly owned electric utility or electrical cooperative and shall present the report at a public meeting of the local publicly owned electric utility or electrical cooperative’s its governing board.”

TANC contracted for an independent evaluation (IE) of the 2023 Comprehensive Revision of this Plan. The independent evaluator:

- Had experience in assessing the safe operation of electrical infrastructure;
- Was required to review and assess the comprehensiveness of this Plan;
- Issued a report that was made available on the TANC Internet Web site from May 22, 2023 through June 30, 2023; and
- Presented the report at the duly noticed May 17, 2023, TANC Commission meeting.

The IE Report is being posted as a separate document to the Office of Energy Infrastructure Safety, WSAB docket titled publicly-owned-utility-and-electrical-cooperative-wildfire-mitigation-plans; 2023 WMPs and related material.

### **2. Agency Presentation and Comments**

PUC Section 8387 (b)(3) states that:

“The local publicly owned electric utility or electrical cooperative shall present its WMP in an appropriately noticed public meeting. The local publicly owned electric utility or electrical cooperative shall accept comments on its WMP from the public, other local and state agencies, and interested parties, and shall verify that the WMP complies will all applicable rules, regulations, and standards, as appropriate.”

TANC presented this WMP at the May 17, 2023 TANC Commission meeting. It was also posted on the TANC website from May 22, 2023 through June 30, 2023 for accepting comments from the public, local and state agencies, and other interested parties. The TANC Commission resolution adopting that Plan included verification that this WMP complies with all applicable rules, regulations, and standards as appropriate.

## **APPENDIX A**

### **APPROACH AND RESPONSES TO THE 2025 GUIDANCE ADVISORY OPINION**

The Advisory Opinion for the 2025 Wildfire Mitigation Plans of Publicly Owned Electrical Utilities and Electrical Cooperatives (2025 Advisory Opinion) included ten substantive WSAB Recommendations for the 2025 POU WMP updates. Table A-1, below, summarizes how we have addressed each of those Recommendations in this 2025 Plan update.

**THE REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK**

<b>Table A-1. 2025 Advisory Opinion Recommendations and Responses</b>		
<b>No.</b>	<b>Recommendation Title &amp; Overview</b>	<b>Responses in this WMP</b>
<b>1.</b>	<b>Summary of Projects &amp; Programs</b>	<b>Response in this WMP</b>
1	Overview: The 2025 Advisory Opinion states in <i>Recommendation 1 – Summary of Projects and Programs</i> - that: ‘ <i>Central to understanding utility risk mitigation are the projects and programs that utilities have completed and currently have underway.</i> ’ It continues to recommend that the “ <i>POUs include a standalone summary of key wildfire mitigation initiatives in their WMPs.</i> ”	This 2025 TANC-COTP WMP has added Appendix B – Summary of Projects and Programs - to respond to this Recommendation. Appendix B presents a comprehensive summary of four types of Wildfire Prevention, Mitigation, and Response Strategies (Wildfire Strategies) that TANC implements for wildfire risk reduction, including: <ul style="list-style-type: none"> <li>• Scheduled, Routine Annual Inspections;</li> <li>• As-Needed Prioritized Maintenance Projects;</li> <li>• Enhanced Wildfire Strategies Under Three-Year Evaluation; and</li> <li>• Completed Strategies.</li> </ul> The intent of Appendix B is to provide the WSAB and other readers and reviewers with a standalone table that improves their understanding of how these Wildfire Strategies mutually complement one another as they are implemented on an ongoing basis for the COTP.
<b>2</b>	<b>Late WMP Submissions</b>	<b>Response in this WMP</b>
2	Overview: This Recommendation calls for a letter explaining any causes for delays and an estimated timeline for submitting a late WMP.	Not Applicable to TANC. TANC schedules its approval and adoption of the final version of the Plan for its May meeting every year, which provides adequate time for filing it by the July 1 deadline if revisions are requested by the TANC Commission.
<b>3</b>	<b>Tracking Changes to WMPs</b>	<b>Response in this WMP</b>
3	Overview: This Recommendation requests a WMP Revision Log – among other options.	The Executive Summary and Revision Log found at the front of this Plan update is our response to Recommendation No. 3.
<b>4</b>	<b>Digital Accessibility</b>	<b>Response in this WMP</b>
4	Overview: This Recommendation requests that POUs follow accessible content guidelines, conduct digital accessibility checks of their WMPs prior to submittal, and include internal hyperlinks in the tables of contents of their WMPs.	TANC already provides internal hyperlinks as bookmarks in this Plan. We will work towards following accessible content guidelines, the conduct of a digital accessibility check, and otherwise making the 2026 comprehensive revision of this Plan digitally accessible.
<b>5</b>	<b>Areas That Exceed Minimum Standards in General Orders</b>	<b>Response in this WMP</b>
5	Overview: This Recommendation requests that POUs provide information regarding their decision-making process for exceeding minimum state general order conditions regarding design, construction, or maintenance of facilities.	The COTP was designed and constructed, and is maintained to federal National Electric Safety Code (NESC) and federal National Electrical Reliability Corporation (FERC) standards that exceed the corresponding minimum California General Order standards. These standards were required consistent with the federal Congressional authorizations that were required for COTP design, construction, and maintenance.
<b>6</b>	<b>Independent Evaluator Reports</b>	<b>Response in this WMP</b>
6	Overview: This Recommendation requests that POUs modify Independent Evaluation scopes of work to include evaluation of WMP strategies,	TANC will consider this Recommendation during the preparation of the comprehensive revision of the 2026 TANC-COTP WMP. TANC conducts Independent Evaluations only as part of each three-year comprehensive WMP revision.

<b>Table A-1. 2025 Advisory Opinion Recommendations and Responses</b>		
<b>No.</b>	<b>Recommendation Title &amp; Overview</b>	<b>Responses in this WMP</b>
	projects, and improvement recommendations.	
<b>7</b>	<b>Alternative Reporting for POU's Without Overhead Electric Supply Facilities in the High Fire Threat District</b>	<b>Response in this WMP</b>
7	Overview: This Recommendation proposes alternative reporting for POU's without overhead facilities in the HFTDs.	Not Applicable to TANC or the COTP. The COTP has overhead electric transmission lines in the High Fire Threat Districts.
<b>8</b>	<b>Progress and Achievements</b>	<b>Response in this WMP</b>
8	Overview: This Recommendation requests that: <i>“POUs highlight their recent progress and achievements in their WMP programs by including more detailed information in the WMP regarding project targets and timelines.”</i>	This Recommendation is addressed annually in each version of the TANC-COTP WMP. Tables V-1 through V-6 in Section V of this WMP include annual timelines, targets, and milestones for “Enhanced Wildfire Strategies” within each three-year period between comprehensive Plan revisions. The annual ‘Project Approach’ and ‘Progress’ updates include quantitative targets and ongoing, updated approaches for reducing the wildfire risk reductions that can be achieved through the implementation of each of the Wildfire Strategies. There are currently six of those Enhanced Strategies in this Plan.
<b>9</b>	<b>Quality Assurance/Quality Control Programs</b>	<b>Response in this WMP</b>
9	Overview: This Recommendation requests that POU's provide descriptions of their QA/QC programs and the implementation of any resulting improvements in their inspection and maintenance programs in their WMPs.	Although the TANC-COTP WMP does not include a heading explicitly titled “Quality Assurance and Control,” the reader is referred to the following subsections of this Plan that inherently frame rigorous COTP quality assurance and control programs: <i>Section VII:A, :3, page 52:</i> Advanced Inspection Data Collection, Reporting, and Management Platforms and Practices describes “The foundation for WAPA’s use of the advanced inspection data collection, reporting, and management platforms and practices is strict adherence to guidelines, standards, business rules and maintenance priorities integrated in a comprehensive inspection data collection, quality assurance, reporting, and recordkeeping system that is summarized in Section IV. <i>Section IV:1:b), page 17</i> ‘WAPA Transmission Line Software Business Rule and Maintenance Priorities’ describes the Business Rule as ensuring that COTP inspection data is consistent, reports are accurate and justifiable, system performance is optimized, and ultimately that information is beneficial to all users and supports the maintenance program and reliability standards requirements. This section also asserts that the WAPA Business Rule enables the Sierra Nevada Region of WAPA to meet NERC, WECC, and CAISO reporting requirements; each developed to address stringent quality assurance and quality control requirements. The reader is also referred to Appendix –B – Summary of Projects and Programs – of this WMP. The expansion of the TANC-COTP tower, facility, equipment, and vegetation management inspections that include scheduled and as-needed maintenance priority driven annual infrared and corona inspections, UAV deployments, detailed aerial and ground patrols, and the use of LiDAR and aerial photography are evidence of the resulting

<b>Table A-1. 2025 Advisory Opinion Recommendations and Responses</b>		
<b>No.</b>	<b>Recommendation Title &amp; Overview</b>	<b>Responses in this WMP</b>
		redundancy and related improvements in all of those inspections.
<b>10</b>	<b>Performance Metrics</b>	<b>Response in this WMP</b>
10	<p>Overview: This Recommendation requests that POU's use the CMUA's 2024 metrics template as the starting point for developing their own metrics table, with the expectation that POU's will tailor the metrics to their unique circumstances.</p> <p>This Recommendation also requests that the POU's use the latest version of the Context Setting Template provided in the 2025 Advisory Opinion.</p>	<p>The TANC-COTP already has a metrics table that is considered by the WSAB as "a good set of metrics" and will continue using the existing table. The eleven metrics provided in the TANC-COTP WMP are already tailored to the unique circumstances of a 500kV transmission line with one right of way supported by an extensive maintenance staff and database capable of providing real time incident- and inspection-specific information.</p> <p>The updated context setting template PSPS section and questions are generally inapplicable to TANC and the COTP, which don't directly serve retail customers, have not pre-emptively shut off any 'customers' service in any way, or otherwise been involved in "public safety power shutoffs." WAPA has developed protocols for pre-emptively shut off electricity to its wholesale electricity TANC members and COTP participants which are described adequately in Section VI.</p>
<b>11</b>	<b>Other Topics</b>	<b>Response in this WMP</b>
11	<p>Overview: This Recommendation recommends further WSAB and Joint Associations topics, discussions, and action plans.</p>	None.

## **APPENDIX B – SUMMARY OF PROJECTS AND PROGRAMS**

TANC established a foundation of inspections of transmission towers, conductors, equipment, facilities, vegetation, and access roads from 1993 through 2019. Those inspections serve to monitor and strengthen COTP system reliability and wildfire risk reduction projects and programs. The passage of Senate Bill 901 in 2019 and the 2020 and subsequent requirements for the annual preparation and triennial comprehensive revision of a wildfire mitigation plan consistent with California Public Utilities Code section 8387 focused on the expansion and improvement of this foundation.

The wildfire risk reduction effectiveness of the full set of Wildfire Strategies TANC implements for the COTP is driven by four types of either: 1) Scheduled Routine Inspection Programs; 2) As-Needed Prioritized Maintenance Projects; 3) Enhanced Wildfire Strategies (evaluated for three years between comprehensive Plan revisions); and 4) Completed Strategies.

Table B-1 summarizes each of these programs and projects, progress achieved in 2024, and the continuing lessons learned from completed strategies. It presents a comprehensive summary – in one standalone table – that explains the context and relationships between routine, scheduled inspections, and maintenance-priority driven activities that provide the information and resources flexibility to proactively reduce wildfire risks on an ongoing basis.

**THE REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK**

<b>Table B-1. Summary of TANC's Wildfire Risk Reduction Programs and Projects</b>	
<b>Scheduled Routine Inspection Programs:</b> TANC and WAPA implement Reliability Centered Maintenance (RCM) for the COTP. Line Inspection Software Business Rules record conditions during inspections, follow-up corrective actions, and supporting inspection data pertaining to facilities, equipment, and vegetation management. COTP inspection data is therefore consistent, reports are accurate and justifiable, system performance is optimized, and ultimately that information obtained is beneficial to all users and supports the maintenance program and reliability standards requirements. Maintenance priorities for structure, vegetation, and ROW conditions are recorded for each of the following Scheduled Routine Inspection Programs.	
<b>Program Title</b>	<b>2024 Progress</b>
<b>Tower and Equipment Inspections</b>	
Semi-annual Aerial Line Patrols	Completed as Scheduled
Aerial LiDAR Imagery Flights Every Five Years	Scheduled for 2025
Annual Detailed Tower Inspections on 20% of COTP Towers	312 of 1,562 COTP Tower Inspections Completed as Scheduled
Annual Tier 2 <sup>a</sup> and Tier 3 Infrared and Corona Tower Inspections	Completed as Scheduled
Detailed Tier 2 and Tier 3 Ground Based Inspections Prior to 6/30 <sup>b</sup>	Completed as Scheduled
<b>Substation Inspections</b>	
Monthly Station Inspections	Completed as Scheduled
Annual Infrared Surveys of Substation Equipment	Completed as Scheduled
<b>Communication Site Inspections</b>	
Semi-annual Site Inspection	Completed as Scheduled
<b>Vegetation , Fuels Management, and Access Road Maintenance Inspections and Activities</b>	
<b>Vegetation and Fuels Management Inspections and Activities</b>	
Annual Vegetation Inspections for the Entire 340-mile COTP with no more than 18 Months between Individual Tower Visits	Completed as Scheduled
Quarterly Aerial Vegetation, Ground, and Visibility Inspections	Completed as Scheduled
Aerial LiDAR Imagery Flights Every Five Years	2024-Procurement Prepared/ Flights Scheduled for 2025
Orthophotography of the COTP Right of Way & one-mile buffer	2024-Procurement Prepared/ Flights Scheduled for 2025
Annual Communication Site Defensible Space to 30 feet from Site	Completed as Scheduled
<b>Access Road Inspections and Maintenance</b>	
Annual Six or More Miles of Tier 2/Tier 3 Access Road Brushing	Completed as Scheduled
<b>As-Needed Prioritized Maintenance Projects:</b> Inspection information recorded under Scheduled Routine Inspection Programs is prioritized for scheduling based on the urgency of the maintenance or vegetation management defect or encroachment that affects COTP system performance and reliability. WAPA's Maintenance Priority Ratings (MPRs) are assigned priority ranks as follows : <i>Maintenance Structures</i> - <b>A</b> : Low priority; <b>B</b> : Minimal Defect; <b>C</b> : Moderate Defect; <b>D</b> : Severe Defect; and <b>E</b> : Emergency, with scheduling urgency prioritized accordingly. <i>Vegetation Conditions</i> : - <b>A</b> : No Encroachment; <b>B</b> : Low Priority; <b>C</b> : Medium Priority; <b>D</b> : High Priority; and <b>E</b> : Emergency.	
<b>Maintenance Priority Driven Wildfire Risk Reduction Projects</b>	
<b>Project Title</b>	<b>2024 Progress</b>
Year-Round Manual Ground Patrols for Maintenance Structures	Deployed as needed to verify ground conditions consistent with maintenance priorities
HFTD Area 1 Infrared and Corona Tower Inspections	Scheduled as needed to provide additional detailed scrutiny to facilities and equipment
Unmanned Aerial Vehicle (UAV) Inspections	Conducted as-needed to improve inspection data consistent with maintenance priorities

<b>Table B-1. Summary of TANC's Wildfire Risk Reduction Programs and Projects</b>	
Year-Round Manual Ground Patrols for Vegetation Encroachments Conducted by Utility Arborists	Deployed as needed to verify site-specific vegetation encroachments, minimum vegetation clearance distances and related conditions consistent with maintenance priorities
Aerial Photography of the COTP Right of Way & 300-foot buffer	Flown as needed to identify and assess encroachments and hazards near the COTP
Streaming Video of the COTP Right of Way	Flown as needed to assess ground conditions and hazards within the COTP Right of Way
Orchard Trees Inspections	Deployed as needed to verify site-specific vegetation encroachments, minimum vegetation clearance distances and related conditions consistent with maintenance priorities
Orchard Trees Trimming	Conducted as needed to maintain NERC Standard FAC-003-05 minimum vegetation clearance distances
TANC-USFS Collaborative Fuels Treatments <sup>c</sup>	5,905 Acres of Prescribed Burns, Mastication, and Pile Burning Completed near the COTP
TANC-USFS Collaborative Access Road Maintenance	Seven miles of roadside mowing completed
Right of Way Conditions Monitoring	Conditions involving non-vegetation encroachments, construction activities, material storage or dumping, and structures built or relocated addressed consistent with maintenance priorities
<b>Enhanced Wildfire Strategies Under Three Year Evaluations</b>	
Additional Utility Forester	<b>2024 Progress:</b> WAPA's Vegetation and Road Specialist and current Lead Forester have developed a Fiscal Year 2025 scope of work, which includes comprehensive culvert inspections with minor maintenance as needed, support off-ROW inspections, and providing tree-crew oversight as needed.
COTP Right of Way Coverage for Wildfire Detection	<b>2024 Progress:</b> WAPA Operations Management personnel, the TANC Commission, and other COTP managers were consulted with respect to their needs for additional visual coverage of the COTP as camera or lookout stations. No such additional coverage needs were expressed.
COTP Fuel Breaks and Accumulations	<b>2024 Progress:</b> TANC has prepared a much more detailed set of internal FDP maps. These maps were then used to support continuing WAPA and TANC discussions focused on a more localized and site-specific prioritization of those COTP span segments where more aggressive fuel reductions and maintenance activities would provide the greatest wildfire risk reduction benefits to TANC and the COTP. WAPA has begun developing performance work specifications for vegetation management contractors to reduce COTP ROW fuels accumulations.
Expanded Collaboration with State and Local Agencies	<b>2024 Progress:</b> Progress in this strategy was delayed in 2024 as WAPA and TANC developed more detailed, local FDP maps along the COTP ROW under Wildfire Strategy No. 18, above. The preparation of those more detailed, local FDP maps and the prioritization of COTP span segments for reducing vegetative fuels now provides the basis for meeting and collaborating with State and Local agencies — including CAL FIRE — with a unified and informed approach regarding those areas where it would be most

<b>Table B-1. Summary of TANC's Wildfire Risk Reduction Programs and Projects</b>	
	beneficial to reduce wildfire-related fuels risks near the COTP.
COTP Tier 3 and Tier 2 Access Road Maintenance and Brushing	<b>2024 Progress:</b> Approximately 30 miles of COTP access road brushing was completed in 2024.
Microwave Sites Defensible Space Increases to 100 feet	<b>2024 Progress:</b> Work specifications and maps have been completed for each of the ten communications sites listed in Table V-6. They have been approved for sharing with potentially affected landowners.
<b>Completed Strategies (completed in 2022)</b>	
Acquisition of Aerial Mounted Infrared, Oblique Photography, High-Definition Video and/or Corona Camera Inspection Equipment.	<b>Lessons Learned:</b> Continues to provide insights regarding the appropriate balance of owned equipment and skilled contractors.
Brush and Fuels Control	<b>Lessons Learned:</b> Provided lessons learned on the skills and qualifications of contracted brushing crews to be sought.
Expanded Collaboration with Other Public and Private Agencies	<b>Lessons Learned:</b> Identified the need to maintain U.S. Forest Service agreements and expand State and Local Collaborations.
Technology Application Reviews	<b>Lessons Learned:</b> Costs of satellite-based wildfire risk mitigation technologies, frequency harmonics, and ultrasonic dish were not justifiable based on their risk prediction capabilities.
Upgrade Ground and Aerial Line Inspection Software for More Refined Data and Analyses	<b>Lessons Learned:</b> This strategy culminated in the adoption of the IQGeo maintenance database platform now used by WAPA and explained in detail in Section IV of this Plan.
Review Fire Safety Guidelines and Precautions	<b>Lessons Learned:</b> This strategy expanded WAPA training in LiDAR analysis, UAV inspections, vegetation inspections, worker safety, lone worker precautions, and first aid.
<p>a/ Tiers refer to High Fire Threat District (HFTD) Tiers.</p> <p>b/ The Additional Maintenance Patrolman added in 2022 is dedicated to overseeing the Detailed Tier 2 and Tier 3 Ground Based Inspections conducted annually.</p> <p>c/ Scheduling prioritization considerations for Maintenance Structures, Vegetation, and Right of Way Conditions are explained in greater detail on the first three pages of Section IV of this Plan.</p> <p>d/ USFS Collaborative Activities Represent 2023 Progress, which is annually reported to TANC in July.</p>	



Transmission Agency of Northern California  
P.O. Box 15129 Sacramento, CA 95851-0129 (916) 852-1673

## MEMORANDUM

DATE: May 14, 2025

TO: TANC Commission

FROM: John Roukema  
Interim General Manager

SUBJECT: RESOLUTION APPROVING THE FIRST AMENDMENT TO THE  
MANAGEMENT SERVICES AGREEMENT WITH ROUKEMA CONSULTING  
LLC

---

The Transmission Agency of Northern California Commission will consider a resolution approving an Amendment to the Management Services Agreement with Roukema Consulting LLC, which will extend its term and provide for its Designated Member – Mr. John Roukema to continue serving as the Interim General Manager of TANC and to provide other management services.

Enclosure

RESOLUTION 2025-\_\_

A RESOLUTION OF THE  
TRANSMISSION AGENCY OF NORTHERN CALIFORNIA  
APPROVING THE FIRST AMENDMENT TO THE MANAGEMENT SERVICES AGREEMENT  
WITH ROUKEMA CONSULTING LLC  
TO CONTINUE SERVING AS THE INTERIM GENERAL MANAGER OF TANC  
AND TO PROVIDE OTHER MANAGEMENT SERVICES

WHEREAS, the Transmission Agency of Northern California (TANC) is a joint exercise of powers agency organized under the laws of the State of California; and

WHEREAS, TANC has run under the leadership of a General Manager since TANC Resolution 2006-16 was adopted by the TANC Commission; and

WHEREAS, TANC has run under the leadership of Interim TANC General Manager, Mr. John Roukema, Designated Member of Roukema Consulting, LLC, pursuant to a Management Services Agreement since September 1, 2024; and

WHEREAS, TANC has entered into a new Management Services Agreement with HVT Consulting, LLC for a new TANC Contract Executive/General Manager with a commencement date of July 1, 2025; and

WHEREAS, TANC desires to extend its Management Services Agreement with Roukema Consulting LLC for its Designated Member - Mr. Roukema to continue to support TANC as its Interim General Manager until the July 1, 2025 commencement date of the new Management Services Agreement with HVT Consulting, LLC ; and thereafter to continue to provide consulting and other management services to TANC after the July 1, 2025 commencement date of the new Management Services Agreement with HVT Consulting, LLC .

WHEREAS, contracting mechanisms and timelines for Roukema Consulting LLC's continued support to TANC are still being developed.

NOW, THEREFORE, BE IT HEREBY RESOLVED by the Commission of the Transmission Agency of Northern California that the TANC Chair has the authority to execute on behalf of TANC the First Amendment to the Management Services Agreement with Roukema Consulting LLC to extend its term and for it and its Designated Member, John Roukema, to continue to provide consulting and other management services to TANC after the July 1, 2025 commencement date of the new Management Services Agreement with HVT Consulting, LLC for a TANC Contract Executive/General Manager.

PASSED AND ADOPTED this 21<sup>st</sup> day of May 2025, on a motion by \_\_\_\_\_ and seconded by \_\_\_\_\_.

AYES

NOES

ABSTAIN

ABSENT

City of Alameda

City of Biggs

City of Gridley

City of Healdsburg

City of Lodi

City of Lompoc

Modesto Irrigation District

City of Palo Alto

Plumas-Sierra Rural Electric Cooperative

City of Redding

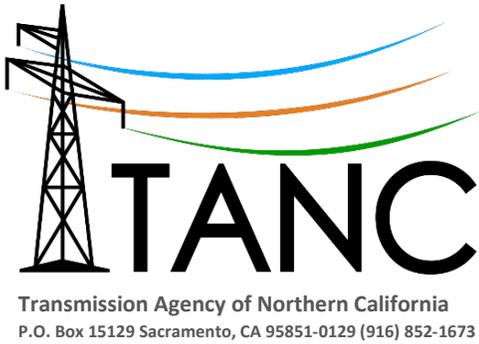
City of Roseville

Sacramento Municipal Utility District

City of Santa Clara

Turlock Irrigation District

City of Ukiah



## MEMORANDUM

DATE: May 14, 2025

TO: TANC Commission

FROM: John Roukema  
General Manager

SUBJECT: RESOLUTION ADOPTING THE FY26 TANC BUDGET AND REVISED OATT

---

The Transmission Agency of Northern California (TANC) Commission is asked to consider the attached proposed Fiscal Year 2026 (FY26) Budget and revised Open Access Transmission Tariff (OATT). The FY26 Budget was reviewed and discussed at the General Manager's Audit/Budget Committee meeting and Budget Workshop on April 24, 2025. Upon conclusion of this meeting, it was determined that the TANC Commission should approve the FY26 TANC Budget.

The FY26 Budget for TANC is proposed with a total use of funds in the amount of \$52,299,895 which reflects a decrease of approximately \$85.9 million or 62.2 percent compared to the current Fiscal Year 2025 (FY25) budget. The primary reason for the decrease in the budget was the funding for the Series Capacitor capital replacement project in FY25.

The FY26 Budget incorporates the FY26 COTP Operation and Maintenance Budget, which was approved at the March 19, 2025 TANC Commission meeting. In addition, the FY26 Budget continues to support identified TANC functions including Debt Service, Agency Administration, Operations, Open Access Same-Time Information System (OASIS), South of Tesla (SOT) activities and California Independent System Operator Congestion Revenue Rights.

### **Budget Summary**

The following table summarizes the proposed FY26 Budget in comparison to the FY25 Budget, including the proposed percentage difference year over year.

A Public Entity whose Members include:  
Alameda, Biggs, Gridley, Healdsburg, Lodi, Lompoc, Modesto Irrigation District,  
Palo Alto, Plumas-Sierra Rural Electric Cooperative, Redding, Roseville,  
Sacramento Municipal Utility District, Santa Clara, Turlock Irrigation District, Ukiah

<b>Budget Category</b>	<b>FY'25 Adjusted Budget</b>	<b>FY'26 Proposed Budget</b>	<b>Dollar Difference</b>	<b>Percent Change</b>
California-Oregon Transmission Project	110,528,600	21,936,500	(88,592,100)	-80.2%
Debt Service	18,552,699	20,973,226	2,420,527	13.0%
Agency Administration	1,413,116	1,541,916	128,800	9.1%
Operations	1,435,420	1,483,900	48,480	3.4%
OASIS	1,133,428	1,146,428	13,000	1.1%
South of Tesla	507,552	512,925	5,373	1.1%

SOT Operations are billed to members based upon actual monthly expenses and are not included in the OATT cash call calculation. The SOT Transmission Service and CAISO Congestion Revenue Rights Program are included for a comprehensive showing of the FY26 TANC Budget, but these two-line items are billed only to Members that participate in these programs, as noted in Table II-1 of the FY26 TANC Budget.

**Recommendations**

I recommend the TANC Commission’s adoption of the proposed FY26 Budget for TANC as presented in the amount of \$52,299,895. When approving the FY26 TANC Budget, the TANC Commission will be authorizing new OATT rates that reflect TANC’s FY26 cost-of-service (base transmission rates).

Approval of the enclosed resolution will authorize execution of the FY26 Budget for TANC as provided and authorize the proposed revisions to TANC’s OATT. Approval of the enclosed resolution will also authorize the TANC Interim General Manager to enter into any new agreements or amendments to existing agreements for contractor services as outlined within the budget document up to the funding levels provided for in the TANC FY26 Budget.

Enclosures

RESOLUTION 2025-\_\_

A RESOLUTION OF THE  
TRANSMISSION AGENCY OF NORTHERN CALIFORNIA  
APPROVING THE FISCAL YEAR 2026 BUDGET AND  
REVISED OPEN ACCESS TRANSMISSION TARIFF

WHEREAS, the Transmission Agency of Northern California (TANC) is a joint exercise of powers agency organized under the laws of the State of California; and

WHEREAS, the Fiscal Year 2026 (FY26) Budget for TANC has been developed by the TANC Interim General Manager, with input received from the General Manger's Audit/Budget Committee, and discussion of funding obligations during the FY26 TANC Budget Workshop held April 24, 2025; and

WHEREAS, the proposed FY26 Budget provides TANC's share of the FY26 California-Oregon Transmission Project (COTP) Operations and Maintenance Budget and Work Plan, which was previously approved by the TANC Commission on March 19, 2025 meeting and by the COTP Management Committee by email vote on March 19, 2025; and

WHEREAS, the FY26 Budget also provides funding obligations for Debt Service, TANC Agency, TANC Operations, TANC Open Access Same-Time Information System, South of Tesla (SOT) functions, and the Congestion Revenue Rights (CRR) program comprising a total TANC financial commitment; and

WHEREAS, the proposed sources of funds in the FY26 Budget are estimated at \$57,815,176 including \$48,808,800 in Open Access Transmission Tariff (OATT) payments, while the uses of funds are estimated at \$52,299,895; and

WHEREAS, the Commission will also be approving and authorizing new OATT rates in tandem and in conjunction with the FY26 TANC Budget; and

WHEREAS, the rate of \$3.50 per kilowatt-month will fully recover TANC's FY26 revenue requirement excluding those costs associated with SOT commitments and the CRR program; and

NOW, THEREFORE, BE IT HEREBY RESOLVED by the Commission of the Transmission Agency of Northern California that the Fiscal Year 2026 Uses of Funds Budget is approved in the amount of \$52,299,895.

BE IT FURTHER RESOLVED that the TANC Commission is authorizing the filing of a new OATT rate in the amount of \$3.50 per kilowatt-month; and

BE IT ADDITIONALLY RESOLVED that the TANC Interim General Manager is authorized to enter into any new agreements or amendments to existing agreements for contractor services as outlined within the budget document up to the funding levels provided for in the TANC FY26 Budget.

PASSED AND ADOPTED this 21<sup>st</sup> day of May 2025 on a motion by \_\_\_\_\_  
seconded by \_\_\_\_\_.

AYES      NOES      ABSTAIN      ABSENT

City of Alameda

City of Biggs

City of Gridley

City of Healdsburg

City of Lodi

City of Lompoc

Modesto Irrigation District

City of Palo Alto

Plumas-Sierra Rural Electric Cooperative

City of Redding

City of Roseville

Sacramento Municipal Utility District

City of Santa Clara

Turlock Irrigation District

City of Ukiah



## **FISCAL YEAR 2026 Budget**

**Approval Draft  
May 21, 2025**

## Table of Contents

OVERVIEW	1
ASSUMPTIONS	1
SOURCES OF FUNDS	2
USES OF FUNDS	4
CALIFORNIA-OREGON TRANSMISSION PROJECT	5
DEBT SERVICE	8
AGENCY	9
OPERATIONS	12
OPEN ACCESS TRANSMISSION	16
SOUTH OF TESLA	19
CONGESTION REVENUE RIGHTS	21

APPENDIX A - SOURCES OF FUNDS TABLES

APPENDIX B - USES OF FUNDS TABLES

## **I. OVERVIEW**

The Transmission Agency of Northern California (TANC or Agency) is a Joint Powers Agency (JPA) created in 1984 pursuant to California law. TANC is comprised of 15 municipally owned utilities and districts, each of which appoints a representative to the TANC Commission, the governing body of the Agency. The Agency is the Project Manager for the California-Oregon Transmission Project (COTP) and has an entitlement of 1505.5624 MW and scheduling rights up to 1,479 MW (north-to-south) of the overall rating of 1,700 MW.

TANC Members are charged (cash called) based upon TANC's Open Access Transmission Tariff (OATT). Monthly cash call to Members are based upon the TANC's OATT rate which comprises the total annual revenue requirement for the Agency divided by an identified average twelve (12) coincident peak value for COTP usage. This methodology complies with the Federal Energy Regulatory Commission's (FERC) Order 888. TANC also participates in an Open Access Same-Time Information System (OASIS) in accordance with FERC Order 889. In order to participate in this OASIS, TANC has an agreement with Open Access Technology International, Inc. (OATI) and is a member of their wesTTrans management and marketing system.

TANC incorporates multiple cost allocation methods in establishment of its revenue requirement. Project Agreement No. 3 (PA 3) is used to pay for COTP Operations and Maintenance (O&M), Debt Service, Agency Administration and Operations. OASIS activities are allocated under (Project Agreement No. 5) associated. SOT activities are allocated under the South of Tesla Agreement (SOTA). Finally, OASIS members can participate in the California Independent System Operator Congestion Revenue Rights (CAISO CRR) program and are charged based on their monthly releases of capacity.

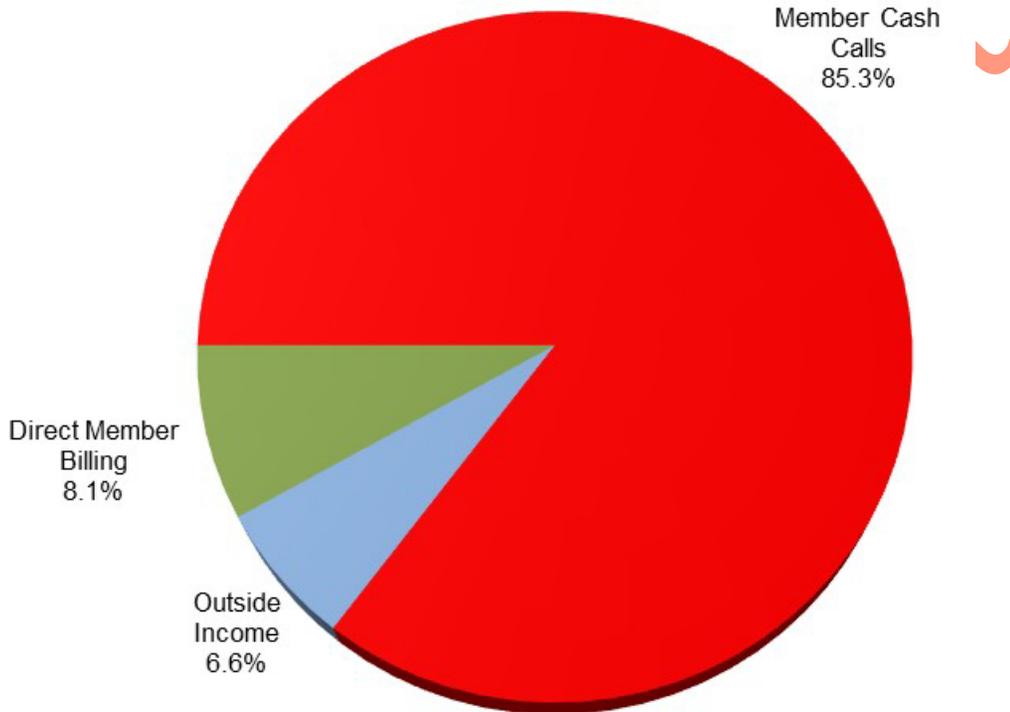
## **II. ASSUMPTIONS**

Presented herein is the Fiscal Year 2026 (FY26) TANC Budget. The FY26 TANC Budget structure will continue incorporating funding categories for COTP Operations, Debt Service, Agency, Operations, OASIS, South of Tesla (SOT) Transmission Service, and the CAISO CRR Program.

This Budget funds operating and restricted reserves as required by TANC bond indentures and other operating requirements. During the budget year, it is anticipated the Commission will meet on a regular basis, and the General Manager's Committees and working groups will meet as needed. The Commission will continue to provide guidance and direction for Agency administration, set goals, and receive updates and reports concerning various matters related to Agency functions and strategies.

In addition to this FY26 Budget, also presented for informational purposes only are the projected FY27 Budget estimates, along with historical values for FY24 and FY25 for comparison purposes.

**III. SOURCES OF FUNDS** **\$57,808,800**



TANC's revenue requirement is recovered via several mechanisms including interest earned on funds, cash calls for SOT related activities, the Western Area Power Administration (WAPA) 27 MW entitlement payment, rental income, and the TANC Open Access Transmission Tariff (OATT). TANC Members are charged the OATT rate, which is adopted when the TANC Commission approves the annual TANC Budget.

In October 2024 TANC opened a line of credit to offset costs related to the purchase of Series Capacitor equipment. It is anticipated that the line of credit will be refunded when TANC issues bonds in the summer of 2026.

For the SOT portion of the TANC Budget, cash calls are made separate and distinct from all other categories of the budget and not rolled into the TANC OATT. SOT Transmission service costs are based on the volumetric amount billed to TANC by Pacific Gas and Electric (PG&E), while charges for administrative and general expenses, operational expenses, and SOT debt

service costs are calculated through the SOT Agreement TANC has with its members and related cost allocation percentages.

Similarly, costs associated with the CAISO CRR Program are not included in OATT cash call calculations and are billed only to those members who utilize the program.

The FY26 TANC Budget includes interest income at existing and assumed rates for investments (average of 0.30 percent). It is anticipated that all interest earnings, except for Fidelity Fund interest, will be added to the contingency balance (i.e., a carry forward of collected, but unspent funds).

This Budget does not include funding for arbitrage expenses.

TANC's Treasurer manages the Agency's funds in order to maximize returns on the Agency within the parameters of existing legislation and TANC's bond indentures.

Pursuant to an agreement between TANC and WAPA, (Contract No. 93-SAO-00009), TANC has agreed to provide WAPA with a 27 MW assignment<sup>1</sup> of TANC's share of COTP capacity for the life of the COTP. WAPA compensates TANC for these costs.

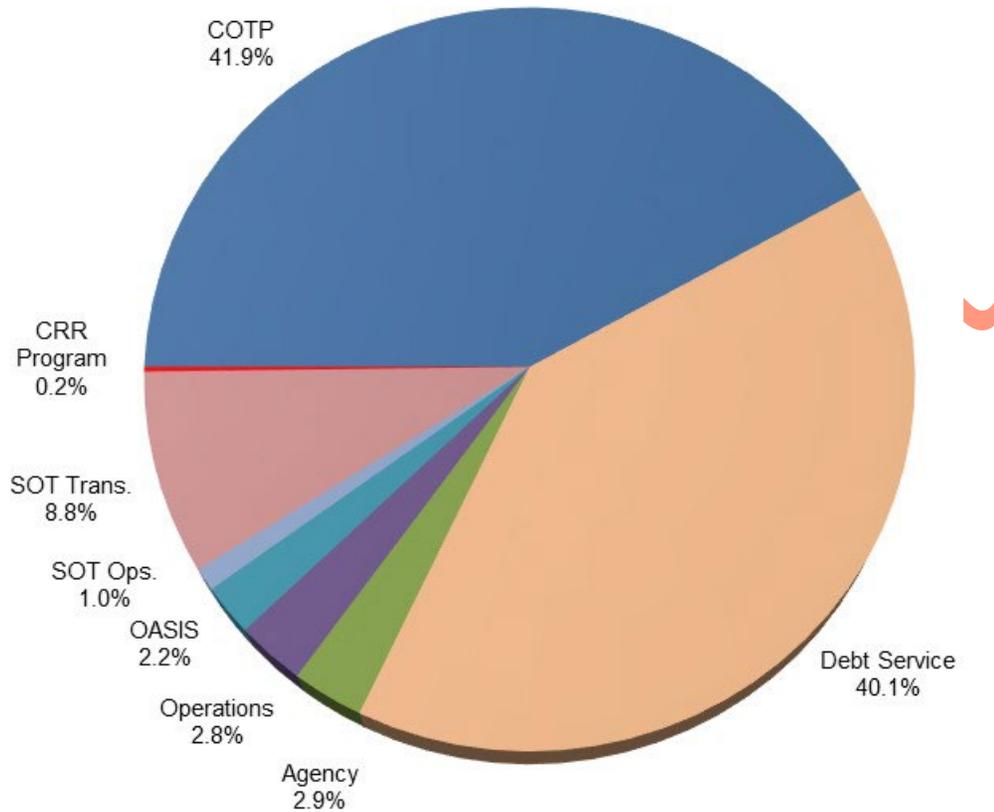
Table I-1 provides a summary of TANC's Sources of Funds for FY24 through FY27.

---

<sup>1</sup> On April 1, 2025 the COTP was actively rerated to 1700 MW and members received a pro-rata increase in entitlement. As part of this rating increase for the COTP the Western Area Power Administration (WAPA) also received an increase in COTP entitlement. As of this writing WAPA's 27 MW assignment is being reviewed and an adjustment may be made prior to Commission consideration of the FY26 TANC Budget at their May 21, 2025 meeting.

IV. USES OF FUNDS

\$52,299,895

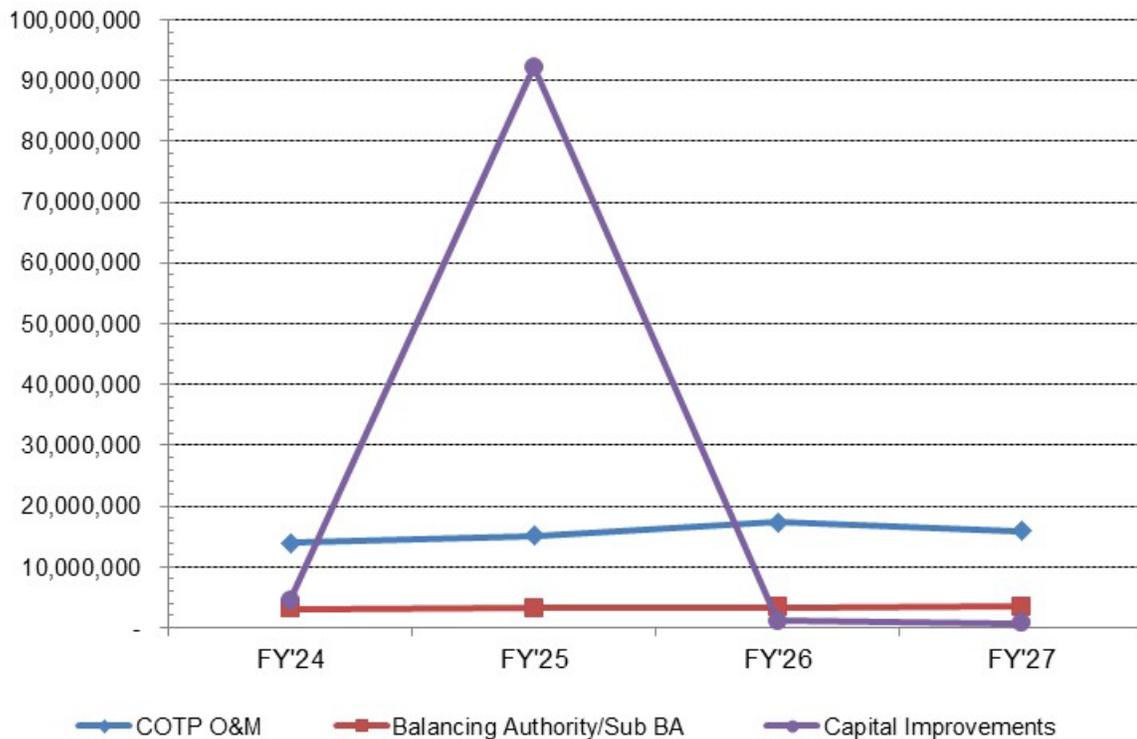


TANC's uses of funds are divided into the following categories:

- A. California-Oregon Transmission Project Operations
- B. Debt Service
- C. TANC Agency
- D. TANC Operations
- E. TANC OASIS
- F. SOT Transmission Service
- G. Congestion Revenue Rights

Table II-1 provides a summary of TANC's Uses of Funds for FY24 through FY27.

**A. CALIFORNIA-OREGON TRANSMISSION PROJECT \$21,936,500**



The COTP is an approximately 340-mile-long, 500-kV AC transmission line stretching from just north of the California-Oregon border to central California. The COTP began commercial operation on March 17, 1993, after nearly 10 years of planning and development. COTP’s original cost of construction was approximately \$430 million, and it is shared between TANC, WAPA, and the Pacific Gas and Electric Company (PG&E).

TANC is the Project Manager of the COTP since it has the largest share of entitlement. Operation of the COTP is coordinated with the Pacific AC Intertie (PACI) in order to optimize the 5,100 MW transfer capability of the three-line California-Oregon Intertie (COI). Of the 5,100 MW transfer capability at COI, COTP is allocated 1,700 MW.

Before 1998, PG&E coordinated COI operation in California with the Bonneville Power Administration (BPA) in the northwest and Southern California Edison Company (SCE) in the south. Beginning in 1998, the California Independent System Operator (CAISO) began carrying out these functions. In December 2005, operational control of the COTP was transferred to the SMUD-WAPA Balancing Authority (BA) and Sub-BA. TANC has an operational agreement with SMUD to perform BA functions, and SMUD functionally separates itself from these duties through a joint power authority, which is known as the Balancing Authority of Northern California (BANC). Further, TANC coordinates with WAPA in their Sub-BA duties.

This section of the Budget discusses TANC's share of expenses incurred for Operations and Maintenance (O&M) of the COTP. In March 2025, The TANC Commission in conjunction with the COTP Management Committee considered and approved the FY26 COTP O&M Budget.

In this portion of the TANC Budget, there are three sections: COTP Operations, Balancing Authority Service, and Capital Improvements.

**1. COTP Operations**

**\$17,374,600**

The Interim Participation Agreement (IPA), the Project Operations and Maintenance Agreement (POMA), the TANC/WAPA O&M Agreement (TWOMA), and the approved COTP O&M Budget govern the responsibilities, costs, and sources of funds associated with the operations and maintenance of the COTP. TANC will continue to be responsible for the management and administration of activities related to the COTP. This role is separate from any similar role TANC may assume on its own behalf, as an individual COTP Participant. The following describes in further detail the various cost elements under COTP Operations:

- a. **Operations** - There are four principal sub-groups involved in support of Operations for WAPA's efforts in this budget category. They include supervision and dispatch, computer system maintenance, operations studies, and administrative and financial tracking.
- b. **Maintenance** - The services provided under the maintenance umbrella for the COTP include the maintenance of transmission lines, substations, communication systems, and vegetation management.
- c. **Natural Resources** - This line item in the budget includes services associated with environmental and land related activities. Environmental services include compliance with all environmental permits and requirements for the Project. Land services are those associated with Project right-of-way (ROW), leases, and related land matters including access roads, fire suppression, and fuels management.
- d. **Project Management** - Project Management encompasses many functional areas of COTP management such as insurance requirements, overall Project Management, and System Studies.
- e. **Compliance Standards** - With continued North American Electric Reliability Council (NERC) and Western Electricity Coordinating Council (WECC) requirements for reporting system reliability mandates, there remains a significant amount of work placed upon WAPA and the Project Manager associated with COTP management and operations. WAPA will provide comprehensive evidence of compliance for each identified and delegated standard related to TANC as a Transmission Owner (TO), Transmission Service Provider (TSP), and Transmission Planner (TP). These requirements are in addition to the reporting requirements TANC as an Agency will have unto itself. The discussion on TANC related reliability standards is reported in the TANC Operations section of this Budget. In addition, there is funding in the compliance section for the compilation of an annual wildfire mitigation plan for the

COTP as required by Senate Bill 901 and Assembly Bill 1054. Wildfire plans are submitted to the California Wildfire Safety Advisor Board and meet the requirements of Public Utilities Code section 8387.

- f. **Security/Safety** - Security funding provides 24-hour surveillance from WAPA's Folsom office, using security cameras, of the Olinda and Tracy Substations along with the Maxwell Compensation Station. In addition, funding is provided for an on-site around-the-clock armed guard for the Tracy Substation. The funding for safety, provides specialist in support of maintenance work to cover Occupational Safety and Health Administration standards and other federal regulations to insure a safe workplace during maintenance activities.

**2. Balancing Authority Service \$3,381,600**

Balancing Authority and /Sub-Balancing Authority duties for the COTP were authorized under Resolution 2005-14, with the formal transfer of COTP control occurring in December 2005. This allowed SMUD and WAPA to jointly administer balancing authority functions of the COTP. These entities work closely and coordinate with the CAISO on a daily basis regarding scheduling and congestion issues.

- a. **Sub-Balancing Authority** - Under this category, costs are associated with COTP joining the SMUD/WAPA BA. Funding covers the costs for WAPA personnel to perform scheduling, settlements, automatic generation control, computer and engineering support, and maintenance of control equipment.
- b. **Balancing Authority** - Under this category, functions are those provided by BANC administrated by SMUD. Funding includes costs for power system operators, settlements personnel, outage coordination, operations engineering, and reliability/critical infrastructure protection and administration.

**3. Capital Improvements \$1,180,300**

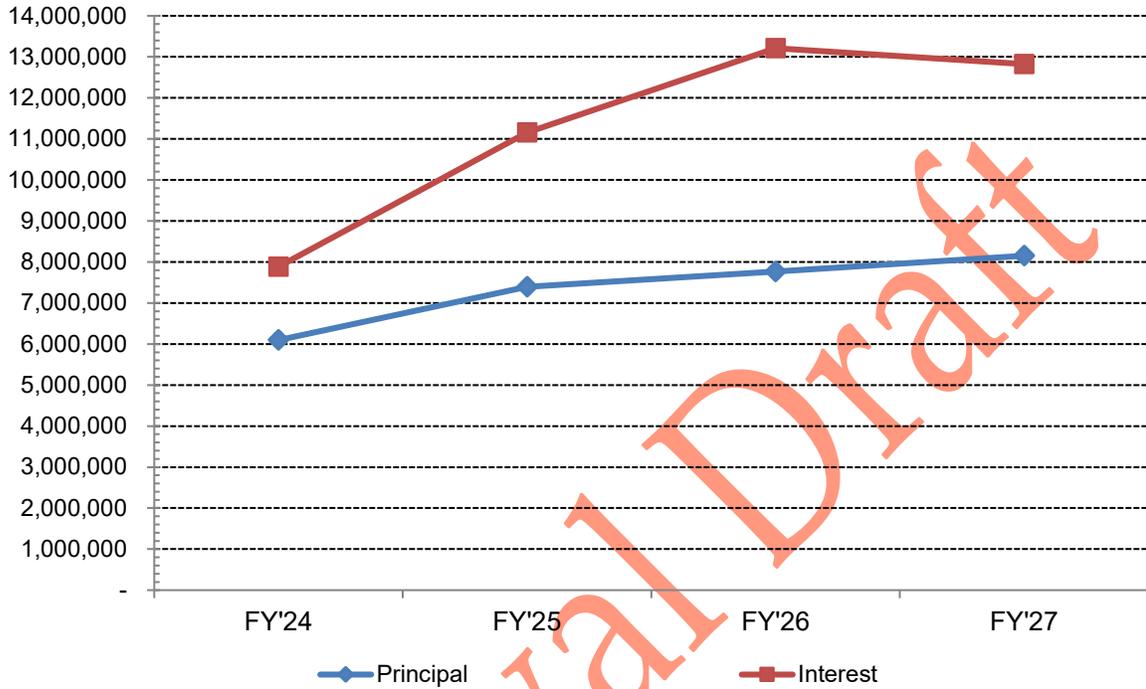
The COTP Management Committee, in conjunction with the Joint COTP and General Manager's Engineering and Operations (E&O) Committee overview, has prepared a five-year capital improvement program from FY26 through FY30. Within these five years, it is anticipated that several projects will be funded.

The following chart indicates TANC's share of the current projected five-year capital improvement estimate discussed with the COTP Management Committee.

	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Total
Breaker/MOD Ground Switch	336,900	-	-	-	-	336,900
D20 TO RTU SCADA	405,900	223,500	269,500	266,600	-	1,165,500
Series Cap Bank	437,500	556,000	449,200	608,700	512,500	2,563,900
SONET Network	-	-	246,900	-	-	246,900
<b>Total</b>	<b>1,180,300</b>	<b>779,500</b>	<b>965,600</b>	<b>875,300</b>	<b>512,500</b>	<b>4,313,200</b>

**B. DEBT SERVICE**

**\$20,973,226**



**1. Principal Payments**

**\$7,763,261**

Over the years, TANC has refinanced and refunded several different original bond issuances. Each issuance had its own unique set of requirements and shaped timetable for payment. TANC incurs debts as a result of its changing needs for financing and refinancing programs. Currently TANC only has one outstanding bond obligation and that is the 2016 Series A Bonds. It is expected that TANC will issue bonds in the Summer of 2026 which will require a principal payment.

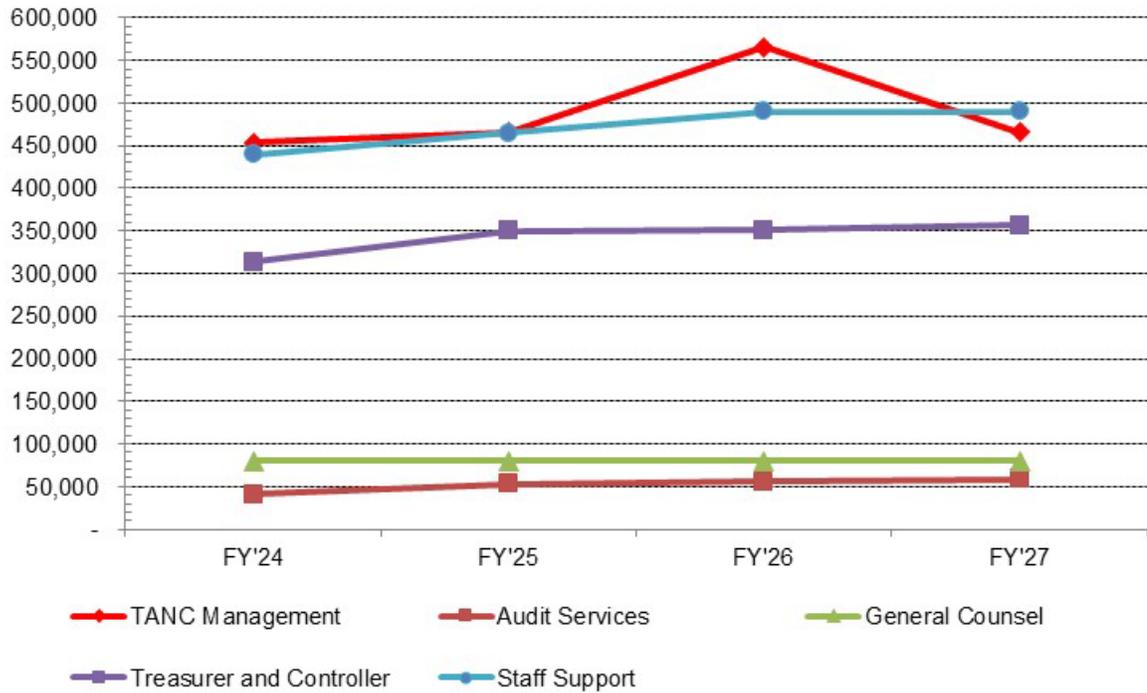
**2. Interest/Fees Payments**

**\$13,209,965**

In addition to the existing principal payments identified above, TANC will also make related interest payments and pay bond fees. TANC will also make interest payments for the previously mentioned line of credit for funds that will be used to offset cash calls related to the Series Capacitor project.

C. AGENCY

\$1,541,916



The concept behind the TANC Agency budget is to articulate general overhead costs associated with managing the Agency. The TANC Agency budget consists of five funding categories, descriptions for which are provided below.

1. TANC Management

\$565,416

TANC incurs certain administrative expenses pursuant to contractor agreements which have been entered into at various times throughout the past several years. This section also provides for dues, travel by TANC representatives, and other miscellaneous items.

- a. **General Manager** – The duties and responsibilities of the TANC General Manager are varied. However, the overall role of the General Manager will be to guide the Agency in all aspects of production, strategic planning, communication with outside parties and TANC Commissioners, directing project assignments, and daily management activities. For budget allocation purposes, 80 percent of the total General Manager cost is reflected here.
- b. **Strategic Management Support** – Contract with advisor for transition of new TANC General Manager.
- c. **Agency Dues** – Agency Dues fund those costs incurred by TANC being a member in an organization. These organizations include the California Municipal Utility Association (CMUA), WestConnect, and American Public Power Association (APPA).

- d. **Media and Outreach Services** – This line item pays for annual costs related to hosting the TANC website as well as any potential upgrades to the site. This line item also funds the storage of TANC files on a cloud-based service.
- e. **Miscellaneous Expenses** – These costs pertain to bank charges associated with maintenance of TANC accounts, certain periodic legal expenses outside of those mentioned elsewhere within this budget document, fees imposed by the State of California to maintain TANC as an entity, expenses related to various presentations, public notices for special meetings, miscellaneous insurance costs, and travel for the TANC Chair, Officers, Commissioners, General Manager, and other Members as they may be deemed appropriate.

**2. Audit Services** **\$55,500**

At the May 22, 2024 meeting, the Commission approved the first amendment to the original agreement for an additional three more years of audit services with an option for two additional years that can be added to the contract.

The Audit Services category provides a budget for an annual independent audit of TANC’s financial statements. It is the goal of each audit that it will ultimately consummate in an unqualified opinion stating that the Agency’s records and financial statements are in conformance with the appropriate Generally Accepted Accounting Principles.

**3. General Counsel Services** **\$80,000**

General Counsel provides general legal assistance to TANC. Assistance will be provided regarding requirements under state law, legal review of TANC documents and resolutions, legal requirements for the Commission and Committee meetings, and advice on TANC’s legal responsibilities. General Counsel will also advise TANC with respect to contracts relating to TANC’s business and will provide legal review of other contracts in regard to their specific impact on TANC. Assistance will be provided in review of agreements between TANC Members and specifying obligations under the Joint Powers Agreement (JPA), as well as other various agreements in support of general TANC arrangements.

**4. Treasurer and Controller Services** **\$351,000**

The TANC JPA established the positions of Treasurer and Controller for TANC. Staff members from SMUD perform the Treasurer and Controller functions. Expenses incurred for Treasurer and Controller duties are reimbursable.

The duties and responsibilities of the Treasurer and Controller are highlighted in the TANC Organization, Authorizations, Policies, and Procedures Manual. Also pertinent are the provisions of the California Government Code pertaining to the Treasurer and Controller of a joint-powers agency. Essential responsibilities include repository of financial books and

records of TANC, management of TANC investments, disbursement of funds, support to TANC's auditor, assistance with preparation of the annual budget, and performance of other related duties.

**5. General Consultant Staff Support**

**\$490,000**

The General Consultant assists with general administrative and technical duties necessary to accomplish work assigned by the Commission and the General Manager. At the January 23, 1985 Commission meeting, a contract was approved and executed for general consulting services with Resource Management International, Inc. (RMI). In 1999, RMI changed its name to Navigant Consulting, Inc. (Navigant), and in the fall of 2019 Guidehouse Inc. acquired Navigant. TANC Resolutions 85-1, 85-3, 87-22, 90-64, 90-76, 91-03, 91-07, 93-37, and 94-29 relate to the responsibilities of the General Consultant, as well as roles outlined in the TANC Organization, Authorizations, Policies, and Procedures Manual.

The General Consultant provides comprehensive general staff support to TANC. Staff support is mainly associated with support to the TANC Commission, the General Manager, and various General Manager authorized Committees as deemed appropriate.

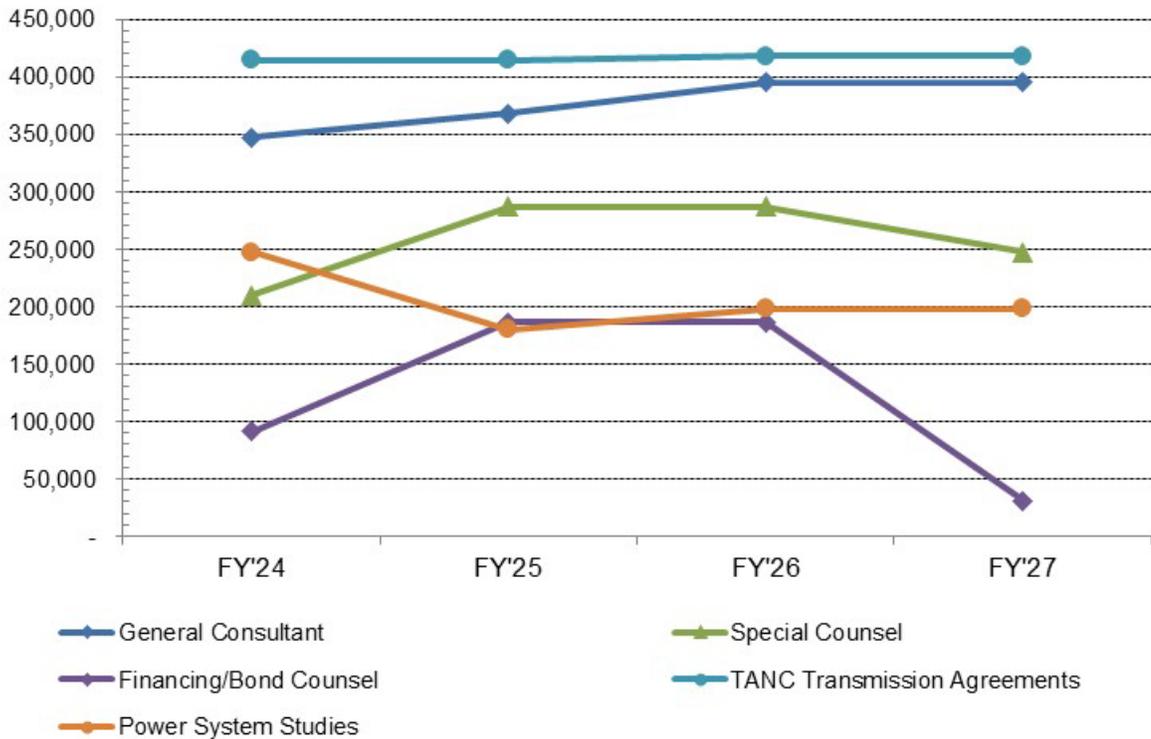
Staff Support includes preparation for and participation in various meetings held by TANC. In addition, the General Consultant prepares for, and participates in workshops and special meetings, as they may be called by Members, the Commission, and General Manager. As the need arises, other working groups or committees may be formed, thereby requiring additional support from the General Consultant.

The General Consultant provides support in preparing and presenting various briefing binders and materials, including the binders for TANC Commission and GM authorized Committees. The General Consultant also serves as liaison to Members regarding TANC activities, prepares and reviews TANC invoices, monitors TANC budget versus actual expenses, and assists in the preparation of the TANC budget.

Further, the General Consultant supports the Agency in a variety of public forums and prepares material on behalf of the TANC Chair and General Manager. Finally, the General Consultant reviews all contracts each year which assist in the administration of the Agency.

**D. OPERATIONS**

**\$1,483,900**



**1. General Consultant Services**

**\$395,000**

The authorization for General Consultant Services in this category is similar to that found in the TANC Agency category of the budget document and pertains to this section as well. In this section of the budget for General Consultant Services, additional operational functions are provided to TANC.

- a. **WECC** – TANC staff regularly monitors activity in Western Electric Coordinating Council (WECC) proceedings to protect TANC’s interests. The General Consultant works in coordination with WECC representatives and other TANC members related to this line item.
- b. **Legislative/Regulatory/CMUA** - Legislative and regulatory activities at the local, state, and federal levels arise from time to time that may impact TANC and its interests in the COTP. Staff provide regular updates to the Commission on matters deemed important to TANC interests.
- c. **Independent System Operator** - The CAISO remains an agency of continued interest for TANC and many other municipal electric utilities within California. CAISO-related policies, procedures, and other issues have potential to dramatically influence how the COTP and other municipally owned transmission lines conduct business in California. Costs associated with the grid management charge and the transmission access charge (TAC) are also important to TANC Members. Various CAISO filings and

proceedings at FERC are expected to continue during FY24. In particular TANC will remain vigilant in review of the CAISO's Transmission Planning Process and provide comments as appropriate in coordination with other members. Finally, TANC will monitor CAISO Governing Board proceedings. Additionally, as the CAISO prepares to implement its Extended Day-Ahead Market there may be a need to review how the COTP may be employed by members as this market unfolds.

- d. **Transmission Reliability Standards** - In 2007, FERC acted on the Notice of Proposed Rulemaking on Reliability Standards (RM06-16) and ordered the enactment and implementation of certain reliability standards in compliance with prudent transmission utility practices. The standards include numerous requirements such as: personnel training, operating standards, and transmission planning requirements. These standards apply to all users, owners, and operators of the bulk electric system. TANC is responsible for complying with standards applicable to Transmission Owners, Transmission Planners, and Transmission Service Providers. It is anticipated TANC will review various compliance procedures in FY25.

## 2. Special Counsel Services

\$287,000

The firm of Duncan, Weinberg, Genzer & Pembroke, PC (DWGP) is TANC's Special Counsel. This contract was signed on May 25, 1985. Pursuant to a motion adopted at the February 22, 1986 TANC Commission meeting, the TANC Commission approved negotiating procedures for various COTP-related agreements, including the role of TANC Special Counsel. Special Counsel Services are divided into the following categories:

- a. **Contracts Committee Support** - Special Counsel Contract Support will consist of the review of various TANC agreements between COTP Participants and TANC Members. Special Counsel will also assist in developing negotiating strategies and review contract drafts for legal sufficiency. This budget category also includes the support of the Contracts Committee for various issues as they arise in providing updates to current case management activity.
- b. **FERC Matters** - Special Counsel will remain diligent and involved in various negotiation and litigation activities related to protecting TANC's interests before FERC. These activities will involve case management, coordination of proceedings, and providing reports to TANC management on matters outside of PA6 (PTO Engagement) activity. Finally, it is expected that Special Counsel will assist in review of various TANC governing agreements that will be updated in FY25.
- c. **Independent System Operator** - This work effort by Special Counsel generally assist activity undertaken by the General Consultant. The two contractors have a long history of working together on CAISO and other related issues of concern for the Agency.
- d. **Transmission Reliability Standards** - As NERC and FERC continue to address on-going reliability standard issues, this line item will fund activities related to review of compliance requirements for TANC as project manager for the 500-kV COTP. Special

Counsel may from time to time recommend compliance filings to amend certain regulations. Further, vigilance in monitoring changes to old, and any proposed new, reliability standards will remain important to TANC, and Special Counsel will be prepared to assist in reliability compliance matters.

**3. Financing Advice Services** **\$108,500**

On a periodic basis, TANC reviews financial advisor services. Upon completion of these reviews, the Finance Committee makes a recommendation to the Commission for approval of a contract for said services. Public Financial Management (PFM) is TANC's current Financial Advisor.

The duties of the Financial Advisor are described in the Financial Advisory Services Agreement between TANC and PFM. In addition, this budget category includes trustee fees associated with TANC's bond programs. The budget assumes TANC will continue to receive general financial advice and services from the Financial Advisor as required. If portions of TANC's financial program are restructured, costs for Financing Advice Services will be revised; however, most of the associated cost would be incorporated into any new issuance that is placed for the Agency. For FY26 it is expected that the Financial Advisor will be called upon to provide guidance associated with the Series Capacitor Line of Credit and ultimately the related bond financing.

**4. Bond Counsel Services** **\$77,500**

On April 20, 1994, the TANC Commission approved Resolution 94-12, which authorized a contract between TANC and Orrick, Herrington & Sutcliffe (Orrick) for TANC's Bond Counsel services. This contract has continued to be renewed on an annual basis through the TANC Treasurer. The budget does continue funding for Bond Logistix arbitrage rebate calculations for TANC's bond program. For FY26 it is expected that Bond Counsel will be called upon to provide guidance associated with the Series Capacitor Line of Credit and ultimately the related bond financing.

**5. TANC Transmission Agreements** **\$417,900**

SMUD and WAPA work closely together on a variety of functions on behalf of TANC and continue to coordinate with the CAISO on a daily basis regarding scheduling and congestion issues. TANC Resolution 2004-34 authorized a Path Operator Agreement with the CAISO, and PG&E Operations have been included in the TANC Budget since the inception of the COTP to pay for interconnection of the COTP to PG&E's electric system.

- a. **Path Operator** - In addition to activities associated with BA services, TANC also incurs obligations associated with the COTP being operated as part of the three-line COI. The Owner's Coordinated Operating Agreement (OCA) provides for the coordinated

operation of the COTP and the existing PACI. The COI Path Operating Agreement (CPOA) provides for services described in the OCOA. Currently, the CAISO serves as the COI Path Operator.

- b. **PG&E Operations** - The COTP Interconnection Rate Schedule (CIRS) provides for the interconnection of the COTP to PG&E's transmission system. TANC pays this cost separately to PG&E and again, it is not reflected in the COTP O&M Budget.
- c. **Land Matters** - These costs reflect the association of land acquired by TANC near the Tracy Substation where the COTP terminates. Costs in this line item include certain property taxes that must be paid as well as some management support of the land.

**6. Technical Support**

**\$198,000**

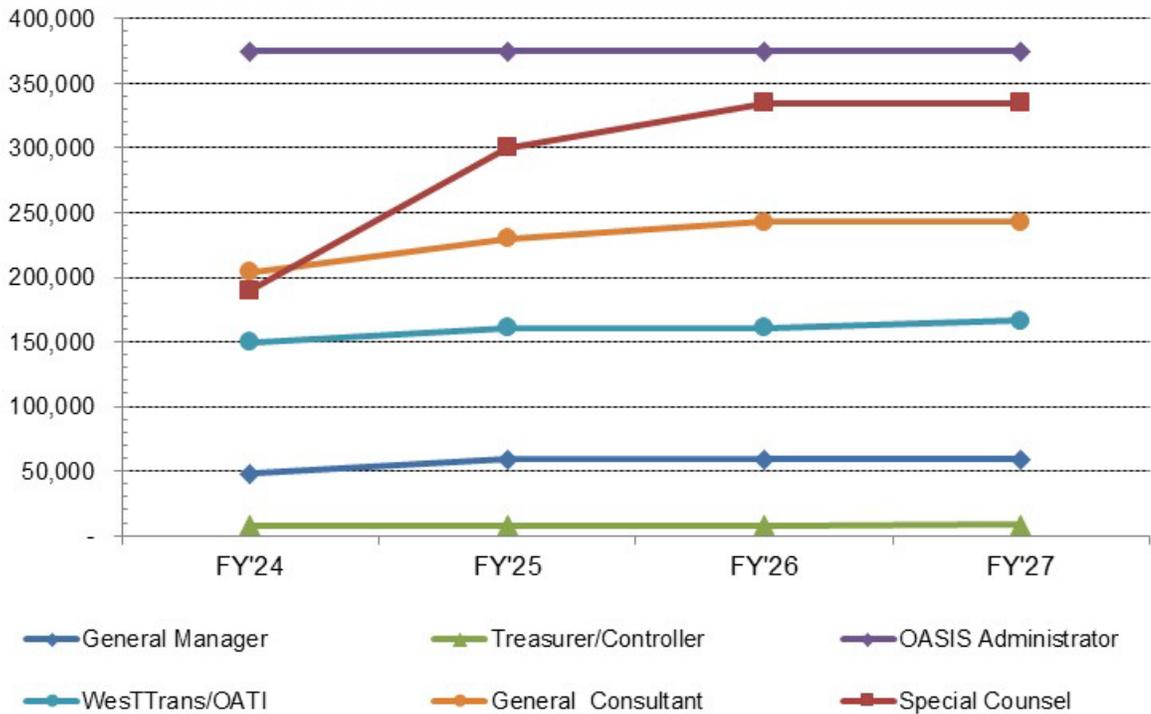
On December 15, 1985, the TANC Commission passed Resolution 85-28, authorizing execution of an agreement with RMI (now Guidehouse) to provide technical and analytical support to TANC representatives on the COTP Power System Studies Committee. Since that time, direction has been provided by the TANC Commission, General Manager, and the General Manager's E&O Committee on a regular and annual basis to continue Power System Studies (PSS) activities.

Staff provide technical engineering support to the General Manager and Commission as requested. Support provided will consist of performing technical studies including power flow and stability analysis in order to:

- Identify potential problems with the existing system under certain operating conditions and assess both near-term and long-term options for mitigating such problems.
- Evaluate potential long-term transmission expansion options.
- Provide other technical support as directed such as preparing the annual TANC Ten-Year Study Plan to demonstrate compliance with NERC reliability standards, and participating in the Operating Studies Subcommittee (OSS), which conducts studies related to the seasonal Operational Transfer Capability values for COI facilities.

**E. OASIS Services**

**\$1,146,428**



The OASIS Service and WestConnect category includes activities conducted on behalf of TANC as a transmission owner and service provider. TANC incorporates a FERC Pro-Forma like OATT and is a member of WestConnect to comply with FERC Order 1000 obligations.

In FY07, the TANC Commission authorized TANC to participate in an Open Access Same-Time Information System (OASIS) transmission market with an approved OATT. Although not FERC jurisdictional, TANC's OATT remains in compliance with FERC standards for both tariff language and rate development. Additionally, the TANC Commission has authorized both the General Consultant and Special Counsel to become involved in work associated with WestConnect and FERC Order 1000 Implementation activities. Since this Order relates to any organization that has an OATT and specific funding obligations are aligned with OATT related costs (i.e., TANC Project Agreement 5 (PA-5)), all associated costs for OASIS Services and FERC Order 1000 Implementation are included in this funding category. TANC is a member of WestConnect and participates in regional and inter-regional planning efforts that follow FERC Order 1000. It is envisioned that this category of the budget will include five separate line items including:

**1. General Manager**

**\$59,328**

The main duties and responsibilities of the TANC General Manager are explained in the Agency section of this budget document. For OASIS Services the General Manager will continue to provide those basic functions but with a focus on activity related to the TANC OATT and OASIS matters. For budget allocation purposes, 15 percent of the total General Manager cost is reflected in this line item.

**2. Treasurer and Controller Services**

**\$8,300**

In this new line-item, Controller staff will provide invoicing services for PA5 Member transmission sold to 3<sup>rd</sup> parties, and forward proceeds to Members who made transmission available during any particular month.

**3. OASIS Administrator Service**

**\$340,000**

This work includes aggregation and posting of available transmission as well as applying transmission service requests from customers and financial settlements. Currently, operation of TANC's OASIS and associated work with Open Access Technology International (OATI) is performed and administered by Western Area Power Administration

**4. WesTTrans OATI Service**

**\$160,800**

TANC has an agreement with OATI to participate in the WesTTrans OASIS modelling program. The WesTTrans OASIS has computer controls and data entry protocols in order for participating Members to post their schedules onto the OASIS, and for 3<sup>rd</sup>-party acquisition of available transfer capability.

**5. General Consultant**

**\$243,000**

**a. Coordination/Committee Support** - TANC has an established OATI OASIS website. This website offers benefits to TANC Members via the ability to sell excess COTP capacity, while following existing FERC doctrine in Orders 888 and 889. It is anticipated that the General Consultant will continue monitoring this website and will work with WAPA as the TANC OASIS Administrator, its Members, and OATI to ensure smooth functioning and flow of information on the OASIS. The General Consultant will monitor the TANC OATT and how the OATT rate is calculated. Additionally, the General Consultant will conform the TANC OATT with the TANC Business Practices Manual, which provides additional detail, instruction, and insight as to how TANC follows precepts from FERC Orders 888 and 889. It is anticipated in FY26 that there will be several modifications to the TANC OATT to follow new FERC orders and deviate from FERC Pro-Forma Tariff when it is deemed practical for TANC business purposes.

b. **WestConnect** – The General Consultant will continue to be involved in identified FERC market reform activities, with specific focus on entities such as WestConnect and other regional transmission support activities. TANC is a member of WestConnect. This line-item supports participation since TANC is a member of WestConnect and participates in WestConnect’s Planning Management Committee. TANC is a participating Non-Jurisdictional Transmission Owner (TO) in WestConnect and is identified as a Coordinating TO. Of specific concern heading into FY26 is cost allocation obligations that may potentially be applied to TANC from other transmission projects aligned within WestConnect.

6. **Special Counsel**

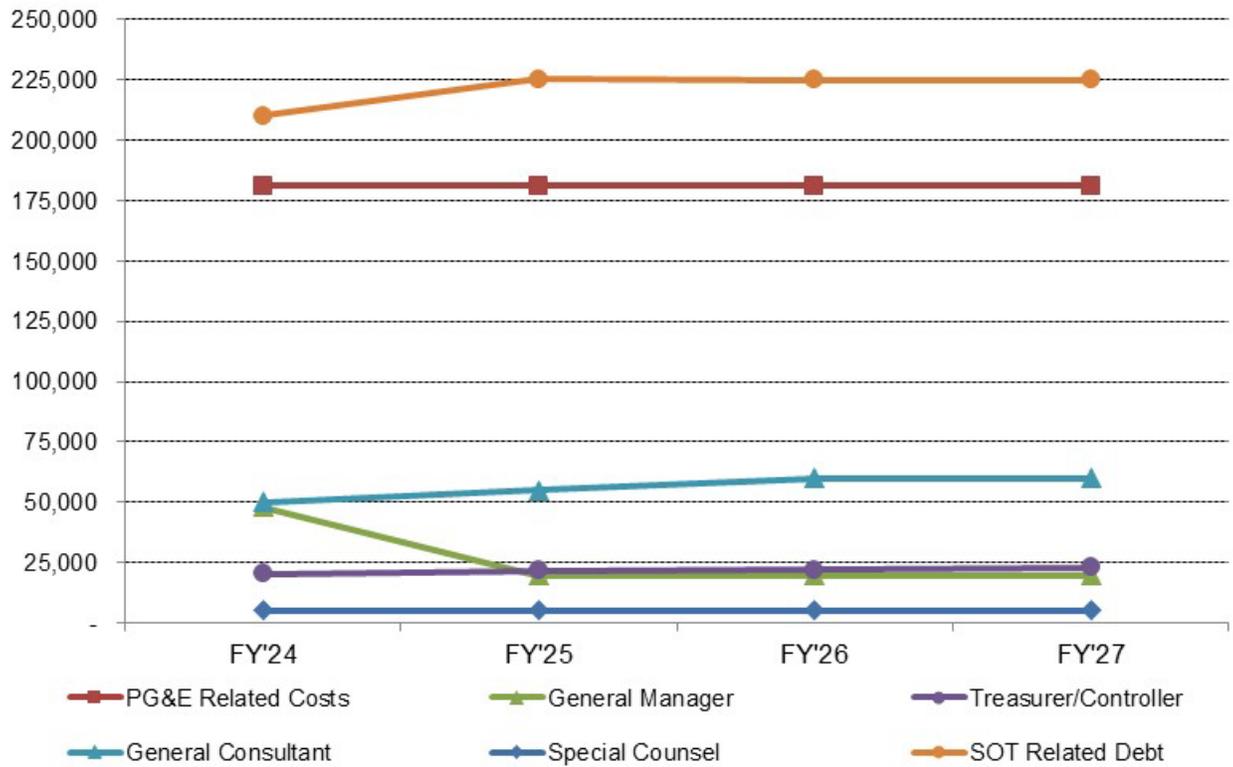
**\$335,000**

- a. **Legal Support** – Special Counsel will support TANC as required and work closely with the General Consultant as needed associated with review of documents for PA5 participants as well as review of TANC’s OATT for reciprocity in accordance with FERC Pro-Forma protocols including rates, terms, and conditions for all appendices to the TANC OATT. It is anticipated Special Counsel will assist staff in development of certain revisions to TANC’s OATT in FY26.
- b. **WestConnect** – As mentioned above, the General Consultant will work with Special Counsel in review and development of new terms and conditions for revision of TANC’s OATT in order to follow the spirit and intent of Order 1000. Additionally, Special Counsel will support the review and potential submittal of comments or protests during the course of proceedings specifically related to cost allocation obligations in FY26, and as new transmission projects are identified through either the regional or inter-regional transmission planning process.

Approved

**G. SOUTH OF TESLA (SOT) TRANSMISSION SERVICE**

**\$512,925**



SOT Transmission Service is provided by PG&E to TANC pursuant to a FERC Order implementing the South of Tesla Principles (SOTP). This service provides 300 MW of firm, bi-directional transmission capability south of PG&E’s Tesla Substation to the Midway Substation. TANC’s SOT Transmission Service costs are budgeted separately from COTP costs pursuant to the TANC SOT Agreement. Only those Members who use PG&E’s transmission south of the Tesla Substation are responsible for repayment of PG&E’s transmission-related costs. Members receive a cash call separate from the TANC OATT cash call for obligations funded within this budget category.

**1. Facilities Charge \$181,000**

On February 26, 1992, FERC ordered PG&E to provide SOT Transmission Service pursuant to the SOTP executed between TANC and PG&E in 1989. TANC Members pay PG&E for certain costs for facilities which PG&E owns and maintains at the Tesla Substation to enable Members to receive SOT service.

**2. General Manager \$19,776**

The main duties and responsibilities of the TANC General Manager are explained in the Agency section of this budget document. For SOT related TANC Management, the General

Manager will continue to provide those basic functions but with a focus on activity related to SOT FERC Matters, particularly associated with any potential PG&E filing on TANC's SOT rights. For budget allocation purposes, 5 percent of the total General Manager cost is placed here.

**3. Treasurer and Controller Services** **\$22,000**

In addition to providing Treasurer and Controller services for TANC Operations, SMUD also provides these services to TANC for SOT related functions. Treasurer/Controller splits its costs and duties for services rendered between the SOT Transmission Service budget category and TANC Operations budget category. Typical work includes coordinating with PG&E on billing and contractual issues regarding this service, coordinating with TANC staff, and performing related Controller functions.

**4. General Consultant Services** **\$60,000**

The authorization for General Consultant Services was provided in the TANC Agency category of the budget document and pertains to this section as well. Line items identifying the level of work activity for the General Consultant include:

- a. **PG&E Transmission Administration** – This line item pertains to work required to process PG&E invoices for use of TANC's SOT rights. Activity mainly includes coordination with Controller staff for activities as mentioned above.
- b. **SOT** – This line item will continue to address issues any potential filing against TANC's 300 MW of SOT rights. This line item will also fund work associated with the value of SOT service. Further, this line item funds work staff to undertake pertaining to SOT arrangements including short-term layoffs.

**5. Special Counsel Services** **\$5,000**

As noted earlier, the firm of Duncan, Weinberg, Genzer & Pembroke, PC (DWGP) is TANC's Special Counsel and pursuant to a motion adopted at the February 22, 1986, TANC Commission meeting, the TANC Commission approved negotiating procedures for various COTP-related agreements, including the role of TANC Special Counsel. Similar to the General Consultant, this line item will address issues as they may arise and any potential filing directly related to TANC's 300 MW of SOT rights, but for FY25 this item is minimally funded.

**6. South of Tesla Debt Service** **\$225,149**

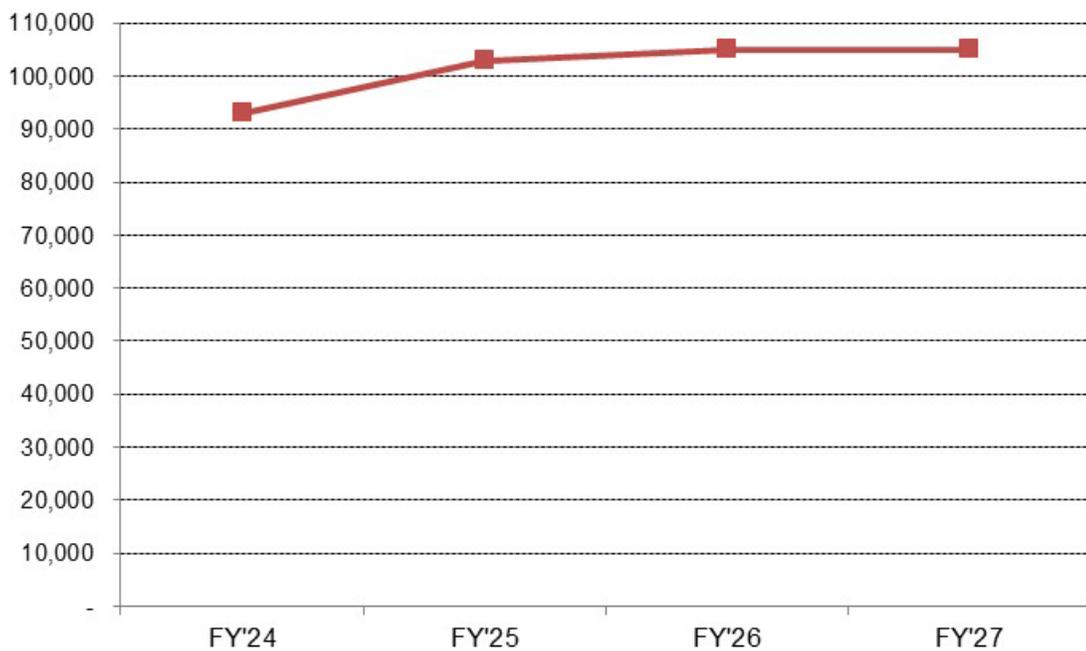
TANC's debt service is paid on an aggregate basis. The portion associated with SOT transmission service is allocated based on the percentage stated in the SOT Agreement applied to the total amount of TANC's debt. The SOT Agreement, dated February 14, 1993,

provides for the respective allocations and cost sharing responsibilities related to SOT Transmission Service.

TANC has capitalized expenses related to SOT Initial Reinforcements and previous work related to SOT FERC Matters. Pursuant to TANC Commission direction, these capitalized costs are to be repaid pursuant to the SOT Agreement. TANC's existing debt programs have provided for SOT debt service to date, and as such, there is not a specific bond or commercial paper program related to the repayment of SOT debt.

#### H. CONGESTION REVENUE RIGHTS PROGRAM

\$105,000



The Congestion Revenue Rights (CRR) Program began in October 2020 and allows TANC members who choose to participate in providing entitlement capacity each month to the CAISO. In return members may earn revenue based upon a formula the CAISO has established depending on the amount of congestion in the system.

Similar to TANC's SOT Transmission Service, costs for the CRR program are budgeted separately from other TANC costs. Only those Members who participate in the program are responsible for payment of certain administrative costs established by both the CAISO and the CRR Administrator (General Consultant). Participating Members receive a cash call separate from the TANC OATT cash call for obligations funded within this budget category.



**Table I-1**  
**TANC Sources/Uses** (on a modified accrual basis)

<b>Sources</b>	<b>FY'24 Adjusted Budget</b>	<b>FY'25 Adjusted Budget</b>	<b>FY'26 Proposed Budget</b>	<b>FY'27 Projected Budget</b>
<b>Member Calls</b>				
Open Access Transmission Tariff	\$ 45,077,388	\$ 45,099,108	\$ 48,808,800	\$ 46,899,648
PTO Engagement-non oatt	72,282	2,100	-	-
South of Tesla	514,606	507,552	512,925	513,913
<b>Outside Income</b>				
27 MW Layoff	470,747	2,203,874	485,227	446,030
Line of Credit	-	90,000,000	-	-
Interest Earned on Funds (net of arbitrage)	1,345,712	1,460,612	1,801,824	1,801,824
Western Administration Fee	-	1,500,000	1,500,000	-
Rental	1,400	1,400	1,400	1,400
<b>Direct Member Billing</b>				
South of Tesla Transmission	4,600,000	4,600,000	4,600,000	4,600,000
CAISO CRR Program	93,000	103,000	105,000	105,000
<b>Total Revenue</b>	<b>\$ 52,175,135</b>	<b>\$ 145,477,646</b>	<b>\$ 57,815,176</b>	<b>\$ 54,367,815</b>
<b>Uses</b>				
<b>Open Access Transmission Tariff</b>				
<b>California-Oregon Transmission Project</b>				
COTP Operations	\$ 13,969,100	\$ 15,120,000	\$ 17,374,600	\$ 15,936,300
Balancing Authority Service	3,055,100	3,265,100	3,381,600	3,490,600
Capital Improvements	4,555,100	92,143,500	1,180,300	779,500
<b>subtotal COTP</b>	<b>21,579,300</b>	<b>110,528,600</b>	<b>21,936,500</b>	<b>20,206,400</b>
<b>Debt Service</b>				
Principal	6,095,019	7,395,465	7,763,261	8,150,768
Interest/Fees	7,884,483	11,157,234	13,209,965	12,821,803
<b>subtotal debt</b>	<b>13,979,502</b>	<b>18,552,699</b>	<b>20,973,226</b>	<b>20,972,571</b>
<b>Agency</b>				
TANC Management	453,800	465,416	565,416	465,416
Audit Services	41,000	52,900	55,500	58,300
General Counsel	80,000	80,000	80,000	80,000
Treasurer/Controller	313,800	349,800	351,000	356,800
Staff Support	440,000	465,000	490,000	490,000
<b>subtotal agency</b>	<b>1,328,600</b>	<b>1,413,116</b>	<b>1,541,916</b>	<b>1,450,516</b>
<b>Operations</b>				
General Consultant	347,000	368,000	395,000	395,000
Special Counsel	210,000	287,000	287,000	247,000
Financing/Advice	38,500	108,500	108,500	18,500
Bond Counsel	52,500	77,500	77,500	12,500
TANC Transmission Agreements	414,420	414,420	417,900	417,900
Power System Studies	247,000	180,000	198,000	198,000
<b>subtotal operations</b>	<b>1,309,420</b>	<b>1,435,420</b>	<b>1,483,900</b>	<b>1,288,900</b>
<b>OASIS</b>				
General Manager	48,000	59,328	59,328	59,328
Treasurer/Controller	8,300	8,300	8,300	8,500
OASIS Administrator	375,000	375,000	340,000	340,000
WesTTrans/OATI	150,000	160,800	160,800	166,200
General Consultant	204,000	230,000	243,000	243,000
Special Counsel	190,000	300,000	335,000	335,000
<b>subtotal OASIS</b>	<b>975,300</b>	<b>1,133,428</b>	<b>1,146,428</b>	<b>1,152,028</b>
<b>PTO Engagement</b>				
General Manager	19,200	-	-	-
Special Counsel	275,000	10,000	-	-
General Consultant	50,000	-	-	-
<b>subtotal PTO</b>	<b>344,200</b>	<b>10,000</b>	<b>-</b>	<b>-</b>
<b>Subtotal -Open Access Transmission Tariff</b>	<b>39,516,322</b>	<b>133,073,263</b>	<b>47,081,970</b>	<b>45,070,415</b>
<b>South of Tesla Operations</b>				
PG&E Facilities Charge	181,000	181,000	181,000	181,000
TANC Management	48,000	19,776	19,776	19,776
Treasurer/Controller	20,400	21,600	22,000	23,000
General Consultant	50,000	55,000	60,000	60,000
Special Counsel	5,000	5,000	5,000	5,000
Debt Service	210,206	225,176	225,149	225,137
<b>Subtotal -South of Tesla Operations</b>	<b>514,606</b>	<b>507,552</b>	<b>512,925</b>	<b>513,913</b>
<b>SOT Transmission Services</b>	<b>4,600,000</b>	<b>4,600,000</b>	<b>4,600,000</b>	<b>4,600,000</b>
<b>CAISO CRR Program</b>	<b>93,000</b>	<b>103,000</b>	<b>105,000</b>	<b>105,000</b>
<b>Total Budget Expenses</b>	<b>44,723,928</b>	<b>138,283,815</b>	<b>52,299,895</b>	<b>50,289,328</b>
<b>Net Sources/Uses of Funds</b>	<b>\$ 7,451,207</b>	<b>\$ 7,193,831</b>	<b>\$ 5,515,281</b>	<b>\$ 4,078,487</b>



**Table 1-2  
OATT Revenue by Member  
Proposed Fiscal Year 2026**

<b>TANC Members</b>	<b>OATT Billings</b>	<b>COTP Operations/ Maintenance</b>	<b>Agency, Operations</b>	<b>Bonds Series 2016</b>	<b>Line of Credit</b>	<b>OASIS/ WestConnect</b>	<b>Total</b>	<b>Available for Owner Distribution</b>
Modesto Irrigation District	\$ 11,252,676	\$ 4,959,065	\$ 684,030	\$ 3,545,121	\$ 1,410,522	\$ 362,214	\$ 10,960,952	\$ 291,724
City of Redding	4,900,308	2,159,570	297,881	1,251,552	504,714	157,737	4,371,454	528,854
Sacramento Municipal Utility District	18,453,336	8,132,407	1,121,745	5,859,607	2,313,120	169,311	17,596,190	857,146
City of Santa Clara	4,788,528	2,110,312	291,086	1,406,031	600,240	154,138	4,561,807	226,721
Turlock Irrigation District	8,368,656	3,688,077	508,716	2,564,075	1,044,690	269,380	8,074,938	293,718
City of Roseville	1,045,296	460,660	63,541	346,840	126,714	33,648	1,031,403	13,893
<b>TOTAL</b>	<b>\$ 48,808,800</b>	<b>\$ 21,510,091</b>	<b>\$ 2,966,999</b>	<b>\$ 14,973,226</b>	<b>\$ 6,000,000</b>	<b>\$ 1,146,428</b>	<b>\$ 46,596,744</b>	<b>\$ 2,212,056</b>

**Projected Fiscal Year 2027**

<b>TANC Members</b>	<b>OATT Billings</b>	<b>COTP Operations/ Maintenance</b>	<b>Agency, Operations</b>	<b>Bonds Series 2016</b>	<b>Line of Credit</b>	<b>OASIS/ WestConnect</b>	<b>Total</b>	<b>Available for Owner Distribution</b>
Modesto Irrigation District	\$ 10,812,528	\$ 4,567,951	\$ 619,285	\$ 3,544,966	\$ 1,410,522	\$ 363,983	\$ 10,506,707	\$ 305,821
City of Redding	4,708,632	1,989,248	269,686	1,251,497	504,714	158,508	4,173,653	534,979
Sacramento Municipal Utility District	17,731,536	7,491,014	1,015,570	5,859,351	2,313,120	170,139	16,849,194	882,342
City of Santa Clara	4,601,232	1,943,875	263,534	1,405,969	600,240	154,891	4,368,509	232,723
Turlock Irrigation District	8,041,320	3,397,203	460,565	2,563,963	1,044,690	270,695	7,737,116	304,204
City of Roseville	1,004,400	424,328	57,527	346,825	126,714	33,812	989,206	15,194
<b>TOTAL</b>	<b>\$ 46,899,648</b>	<b>\$ 19,813,619</b>	<b>\$ 2,686,167</b>	<b>\$ 14,972,571</b>	<b>\$ 6,000,000</b>	<b>\$ 1,152,028</b>	<b>\$ 44,624,385</b>	<b>\$ 2,275,263</b>

**TANC Member Cost Responsibility Percentages**

<b>TANC Members</b>	<b>COTP Operations/ Maintenance</b>	<b>Agency, Operations</b>	<b>Bonds Series 2016</b>	<b>Line of Credit/ Bond Series 2025</b>	<b>OASIS/ WestConnect</b>
Modesto irrigation District	23.0546%	23.0546%	23.6764%	23.5087%	32.4538%
City of Redding	10.0398%	10.0398%	8.3586%	8.4119%	11.6130%
Sacramento Municipal Utility District	37.8074%	37.8074%	39.1339%	38.5520%	15.1701%
City of Santa Clara	9.8108%	9.8108%	9.3903%	10.0040%	13.8102%
Turlock Irrigation District	17.1458%	17.1458%	17.1244%	17.4115%	24.0369%
City of Roseville	2.1416%	2.1416%	2.3164%	2.1119%	2.9160%
<b>TOTAL</b>	<b>100.0000%</b>	<b>100.0000%</b>	<b>100.0000%</b>	<b>100.0000%</b>	<b>100.0000%</b>



**Table I-3  
South of Tesla Revenue by Member**

TANC Members	Proposed Fiscal Year 2026			Projected Fiscal Year 2027		
	Operations	Debt Service	Total	Operations	Debt Service	Total
Modesto Irrigation District	\$ 97,843	\$ 76,550	\$ 174,393	\$ 98,184	\$ 76,547	\$ 174,731
City of Redding	29,736	23,265	53,001	29,839	23,263	53,102
Sacramento Municipal Utility District	46,041	36,022	82,063	46,201	36,019	82,220
City of Santa Clara	77,700	60,790	138,490	77,970	60,787	138,757
Turlock Irrigation District	21,454	16,785	38,239	21,528	16,784	38,312
City of Roseville	-	-	-	-	-	-
<b>Subtotal</b>	<b>272,774</b>	<b>213,412</b>	<b>486,186</b>	<b>273,722</b>	<b>213,400</b>	<b>487,122</b>
<b>Northern California Power Authority</b>						
City of Alameda	6,055	4,737	10,792	6,076	4,737	10,813
City of Healdsburg	682	534	1,216	684	534	1,218
City of Lodi	5,954	4,658	10,612	5,975	4,658	10,633
City of Lompoc	768	601	1,369	771	601	1,372
City of Palo Alto	-	-	-	-	-	-
Plumas Sierra Rural Electric Co-Op	671	525	1,196	673	525	1,198
City of Ukiah	872	682	1,554	875	682	1,557
<b>Subtotal</b>	<b>15,002</b>	<b>11,737</b>	<b>26,739</b>	<b>15,054</b>	<b>11,737</b>	<b>26,791</b>
<b>TOTAL</b>	<b>\$ 287,776</b>	<b>\$ 225,149</b>	<b>\$ 512,925</b>	<b>\$ 288,776</b>	<b>\$ 225,137</b>	<b>\$ 513,913</b>

**TANC Member Cost Responsibility Percentages**

TANC Members	South of Tesla Percentage
Modesto Irrigation District	34.0000%
City of Redding	10.3330%
Sacramento Municipal Utility District	15.9990%
City of Santa Clara	27.0000%
Turlock Irrigation District	7.4550%
City of Roseville	0.0000%
<b>Subtotal</b>	<b>94.7870%</b>
<b>Northern California Power Agency</b>	
City of Alameda	2.1040%
City of Healdsburg	0.2370%
City of Lodi	2.0690%
City of Lompoc	0.2670%
City of Palo Alto	0.0000%
Plumas Sierra Rural Electric Co-Op	0.2330%
City of Ukiah	0.3030%
<b>Subtotal</b>	<b>5.2130%</b>
<b>TOTAL</b>	<b>100.0000%</b>



Table I-4

**Total Revenue by Member**

**Proposed Fiscal Year 2026**

**Projected Fiscal Year 2027**

	OATT	South of Tesla	Total	OATT	South of Tesla	Total
Modesto Irrigation District	\$ 11,252,676	\$ 174,393	<b>\$ 11,427,069</b>	\$ 10,812,528	\$ 174,731	<b>\$ 10,987,259</b>
City of Redding	4,900,308	53,001	<b>4,953,309</b>	4,708,632	53,102	<b>4,761,734</b>
Sacramento Municipal Utility District	18,453,336	82,063	<b>18,535,399</b>	17,731,536	82,220	<b>17,813,756</b>
City of Santa Clara	4,788,528	138,490	<b>4,927,018</b>	4,601,232	138,757	<b>4,739,989</b>
Turlock Irrigation District	8,368,656	38,239	<b>8,406,895</b>	8,041,320	38,312	<b>8,079,632</b>
City of Roseville	1,045,296	-	<b>1,045,296</b>	1,004,400	-	<b>1,004,400</b>
<b>Subtotal</b>	<b>48,808,800</b>	<b>486,186</b>	<b>49,294,986</b>	<b>46,899,648</b>	<b>487,122</b>	<b>47,386,770</b>
<b>Northern California Power Agency</b>						
City of Alameda	-	10,792	<b>10,792</b>	-	10,813	<b>10,813</b>
City of Healdsburg	-	1,216	<b>1,216</b>	-	1,218	<b>1,218</b>
City of Lodi	-	10,612	<b>10,612</b>	-	10,633	<b>10,633</b>
City of Lompoc	-	1,369	<b>1,369</b>	-	1,372	<b>1,372</b>
City of Palo Alto	-	-	<b>-</b>	-	-	<b>-</b>
Plumas Sierra Rural Electric Co-Op	-	1,196	<b>1,196</b>	-	1,198	<b>1,198</b>
City of Ukiah	-	1,554	<b>1,554</b>	-	1,557	<b>1,557</b>
<b>Subtotal</b>	<b>-</b>	<b>26,739</b>	<b>26,739</b>	<b>-</b>	<b>26,791</b>	<b>26,791</b>
<b>TOTAL</b>	<b>\$ 48,808,800</b>	<b>\$ 512,925</b>	<b>\$ 49,321,725</b>	<b>\$ 46,899,648</b>	<b>\$ 513,913</b>	<b>\$ 47,413,561</b>



Table II-1  
**Summary of TANC's Uses of Funds**  
 FY 2024 thru FY 2027

	FY'24 Adjusted Budget	FY'24 Actual	FY'25 Adjusted Budget	FY'26 Proposed Budget	FY'27 Projected Budget <sup>4</sup>
<b>Open Access Transmission Tariff<sup>1</sup></b>					
California-Oregon Transmission Project	\$ 21,579,300	\$ 21,208,135	\$ 110,528,600	\$ 21,936,500	\$ 20,206,400
Debt Service	13,979,502	13,979,011	18,552,699	20,973,226	20,972,571
Agency Administration	1,328,600	1,155,277	1,413,116	1,541,916	1,450,516
TANC Operations	1,309,420	1,074,518	1,435,420	1,483,900	1,288,900
TANC OASIS	975,300	1,009,556	1,133,428	1,146,428	1,152,028
PTO Engagement	344,200	376,575	10,000	-	-
<b>Subtotal</b>	<b>39,516,322</b>	<b>38,803,073</b>	<b>133,073,263</b>	<b>47,081,970</b>	<b>45,070,415</b>
<b>South of Tesla</b>					
Operations	514,606	390,491	507,552	512,925	513,913
SOT Transmission Service <sup>2</sup>	4,600,000	3,948,013	4,600,000	4,600,000	4,600,000
<b>Subtotal</b>	<b>5,114,606</b>	<b>4,338,505</b>	<b>5,107,552</b>	<b>5,112,925</b>	<b>5,113,913</b>
<b>CAISO CRR Program <sup>3</sup></b>	93,000	60,910	103,000	105,000	105,000
<b>Total</b>	<b>\$ 44,723,928</b>	<b>\$ 43,202,487</b>	<b>\$ 138,283,815</b>	<b>\$ 52,299,895</b>	<b>\$ 50,289,328</b>

1) Categories are included in the OATT Calculation

2) Individual members are billed by TANC for their usage

3) Individual members are billed based on their CRR Releases

4) Advisory only



Table II-2  
**California-Oregon Transmission Project**  
 FY 2024 thru FY 2027

	FY'24 Adjusted Budget	FY'24 Actual	FY'25 Adjusted Budget	FY'26 Proposed Budget	FY'27 Projected Budget
<b>1. COTP Operations</b>	<b>\$ 13,969,100</b>	<b>\$ 13,822,716</b>	<b>\$ 15,120,000</b>	<b>\$ 17,374,600</b>	<b>\$ 15,936,300</b>
a. Operations	961,000	962,104	935,800	1,594,100	1,642,500
b. Maintenance	7,017,600	7,499,703	6,728,400	7,451,600	5,690,400
c. Natural Resources	2,215,700	1,335,929	2,259,000	2,480,800	2,635,600
d. Project Management	2,658,300	3,202,356	4,159,300	4,695,800	4,817,300
e. Compliance	715,100	529,778	685,000	750,700	736,500
f. Security/Safety	401,400	292,846	352,500	401,600	414,000
<b>2. Balancing Authority Service</b>	<b>3,055,100</b>	<b>3,138,658</b>	<b>3,265,100</b>	<b>3,381,600</b>	<b>3,490,600</b>
a. Sub-Balancing Authority	671,300	763,172	802,700	870,600	896,800
b. Balancing Authority	2,383,800	2,375,486	2,462,400	2,511,000	2,593,800
<b>3. Capital Improvements</b>	<b>4,555,100</b>	<b>4,246,761</b>	<b>92,143,500</b>	<b>1,180,300</b>	<b>779,500</b>
<b>Total</b>	<b>\$ 21,579,300</b>	<b>\$ 21,208,135</b>	<b>\$ 110,528,600</b>	<b>\$ 21,936,500</b>	<b>\$ 20,206,400</b>



Table II-3  
**Debt Service**  
 FY 2024 thru FY 2027

	FY'24 Adjusted Budget	FY'24 Actual	FY'25 Adjusted Budget	FY'26 Proposed Budget	FY'27 Projected Budget
<b>1. Principal</b>	\$ 6,095,019	\$ 6,095,019	\$ 7,395,465	\$ 7,763,261	\$ 8,150,768
2016 Series A	6,095,019	6,095,019	7,395,465	7,763,261	8,150,768
<b>2. Interest/Fees</b>	<b>7,884,483</b>	<b>7,883,992</b>	<b>11,157,234</b>	<b>13,209,965</b>	<b>12,821,803</b>
2016 Series A	7,884,483	7,883,992	7,579,734	7,209,965	6,821,803
Line of Credit	-	-	3,577,500	6,000,000	6,000,000
<b>Total</b>	<b>\$ 13,979,502</b>	<b>\$ 13,979,011</b>	<b>\$ 18,552,699</b>	<b>\$ 20,973,226</b>	<b>\$ 20,972,571</b>



Table II-4  
**Agency Administration**  
 FY 2024 thru FY 2027

	<b>FY'24 Adjusted Budget</b>	<b>FY'24 Actual</b>	<b>FY'25 Adjusted Budget</b>	<b>FY'26 Proposed Budget</b>	<b>FY'27 Projected Budget</b>
<b>1. TANC Management</b>	\$ 453,800	\$ 373,220	\$ 465,416	\$ 565,416	\$ 465,416
a. General Manager	268,800	269,760	316,416	316,416	316,416
b. Strategic Management Support	36,000	-	-	100,000	-
c. Agency Dues	87,000	59,804	87,000	87,000	87,000
d. Media and Outreach	12,000	3,000	12,000	12,000	12,000
e. Miscellaneous Expenses	50,000	40,656	50,000	50,000	50,000
<b>2. Audit Services</b>	<b>41,000</b>	<b>42,725</b>	<b>52,900</b>	<b>55,500</b>	<b>58,300</b>
<b>3. General Counsel</b>	<b>80,000</b>	<b>35,731</b>	<b>80,000</b>	<b>80,000</b>	<b>80,000</b>
<b>4. Treasurer/Controller</b>	<b>313,800</b>	<b>228,362</b>	<b>349,800</b>	<b>351,000</b>	<b>356,800</b>
<b>5. Staff Support</b>	<b>440,000</b>	<b>475,238</b>	<b>465,000</b>	<b>490,000</b>	<b>490,000</b>
<b>Total</b>	<b>\$ 1,328,600</b>	<b>\$ 1,155,277</b>	<b>\$ 1,413,116</b>	<b>\$ 1,541,916</b>	<b>\$ 1,450,516</b>



Table II-5  
**Operations**  
 FY 2024 thru FY 2027

	FY'24 Adjusted Budget	FY'24 Actual	FY'25 Adjusted Budget	FY'26 Proposed Budget	FY'27 Projected Budget
<b>1. General Consultant</b>	\$ 347,000	\$ 329,350	\$ 368,000	\$ 395,000	\$ 395,000
a. WECC	55,000	31,330	58,000	60,000	60,000
b. Legislative/Regulatory/CMUA	32,000	37,630	35,000	35,000	35,000
c. Independent System Operator	175,000	177,668	190,000	215,000	215,000
d. Transmission Reliability Standards	85,000	82,723	85,000	85,000	85,000
<b>2. Special Counsel</b>	<b>210,000</b>	<b>119,840</b>	<b>287,000</b>	<b>287,000</b>	<b>247,000</b>
a. Committee Support	50,000	54,638	40,000	40,000	40,000
b. FERC Matters	100,000	61,809	180,000	180,000	140,000
c. Independent System Operator	20,000	-	27,000	27,000	27,000
d. Transmission Reliability Standards	40,000	3,393	40,000	40,000	40,000
<b>3. Financing /Advice</b>	<b>38,500</b>	<b>9,727</b>	<b>108,500</b>	<b>108,500</b>	<b>18,500</b>
a. Financial Advisor Support	35,000	7,500	105,000	105,000	15,000
b. Bond Trustee Fees	3,500	2,227	3,500	3,500	3,500
<b>4. Bond Counsel</b>	<b>52,500</b>	<b>1,240</b>	<b>77,500</b>	<b>77,500</b>	<b>12,500</b>
a. Bond Counsel Support	50,000	-	75,000	75,000	10,000
b. Arbitrage Rebate Calculations	2,500	1,240	2,500	2,500	2,500
<b>5. TANC Transmission Agreements</b>	<b>414,420</b>	<b>398,140</b>	<b>414,420</b>	<b>417,900</b>	<b>417,900</b>
a. Path Operator	202,700	202,654	202,700	202,700	202,700
b. PG&E Operations	171,720	171,684	171,720	175,200	175,200
c. Land Matter	40,000	23,801	40,000	40,000	40,000
<b>6. Power System Studies</b>	<b>247,000</b>	<b>216,221</b>	<b>180,000</b>	<b>198,000</b>	<b>198,000</b>
a. Technical Support	172,000	170,654	180,000	198,000	198,000
B. COI Rating	75,000	45,568	-	-	-
<b>Total</b>	<b>\$ 1,309,420</b>	<b>\$ 1,074,518</b>	<b>\$ 1,435,420</b>	<b>\$ 1,483,900</b>	<b>\$ 1,288,900</b>



Table II-6  
**OASIS**  
 FY 2024 thru FY 2027

	FY'24 Adjusted Budget	FY'24 Actual	FY'25 Adjusted Budget	FY'26 Proposed Budget	FY'27 Projected Budget
<b>1. General Manager</b>	\$ 48,000	\$ 48,000	\$ 59,328	\$ 59,328	\$ 59,328
<b>2. Treasurer/Controller</b>	8,300	8,000	8,300	8,300	8,500
<b>3. OASIS Administrator</b>	375,000	368,514	375,000	340,000	340,000
<b>4. WestTTrans OATI</b>	150,000	151,945	160,800	160,800	166,200
<b>5. General Consultant</b>	<b>204,000</b>	<b>210,688</b>	<b>230,000</b>	<b>243,000</b>	<b>243,000</b>
a. Coordinator/Committee Support	172,000	190,158	190,000	198,000	198,000
b. WestConnect	32,000	20,530	40,000	45,000	45,000
<b>6. Special Counsel</b>	<b>190,000</b>	<b>222,409</b>	<b>300,000</b>	<b>335,000</b>	<b>335,000</b>
a. Legal/Committee Support	160,000	204,322	240,000	250,000	250,000
b. WestConnect	30,000	18,088	60,000	85,000	85,000
<b>Total</b>	<b>\$ 975,300</b>	<b>\$ 1,009,556</b>	<b>\$ 1,133,428</b>	<b>\$ 1,146,428</b>	<b>\$ 1,152,028</b>



Table II-7  
**South of Tesla Operations**  
 FY 2024 thru FY 2027

	<b>FY'24 Adjusted Budget</b>	<b>FY'24 Actual</b>	<b>FY'25 Adjusted Budget</b>	<b>FY'26 Proposed Budget</b>	<b>FY'27 Projected Budget</b>
<b>1. PG&amp;E Facilities Charge</b>	\$ 181,000	\$ 180,348	\$ 181,000	\$ 181,000	\$ 181,000
<b>2. General Manager</b>	48,000	48,000	19,776	19,776	19,776
<b>3. Treasurer/Controller</b>	20,400	4,474	21,600	22,000	23,000
<b>4. General Consultant</b>	50,000	39,120	55,000	60,000	60,000
a. PG&E Transmission Administration	30,000	26,880	30,000	30,000	30,000
b. SOT	20,000	12,240	25,000	30,000	30,000
<b>5. Special Counsel</b>	5,000	-	5,000	5,000	5,000
<b>6. SOT Related Debt Service</b>	210,206	118,550	225,176	225,149	225,137
<b>Total</b>	<b>\$ 514,606</b>	<b>\$ 390,491</b>	<b>\$ 507,552</b>	<b>\$ 512,925</b>	<b>\$ 513,913</b>



Transmission Agency of Northern California  
P.O. Box 15129 Sacramento, CA 95851-0129 (916) 852-1673

## MEMORANDUM

DATE: May 14, 2025

TO: TANC Commission

FROM: John Roukema  
Interim General Manager

SUBJECT: RESOLUTION REGARDING VESTING POWER AND AUTHORITY IN THE  
TANC CONTRACT EXECUTIVE/GENERAL MANAGER

---

The Transmission Agency of Northern California Commission will receive a report and may take action on a resolution vesting power and authority, including signing authority, to the new TANC Contract Executive/General Manager.

Enclosure

RESOLUTION 2025-\_\_

A RESOLUTION OF THE  
TRANSMISSION AGENCY OF NORTHERN CALIFORNIA  
VESTING POWER AND AUTHORITY  
IN THE TANC CONTRACT EXECUTIVE/GENERAL MANAGER

WHEREAS, the Transmission Agency of Northern California (TANC) is a joint exercise of powers agency organized under the laws of the State of California; and

WHEREAS, TANC has run under the leadership of a General Manager since TANC Resolution 2006-16 was adopted by the TANC Commission; and

WHEREAS, the previous TANC has run under the leadership of an Interim General Manager and the TANC Commission Chair since September 1, 2024; and

WHEREAS, on April 23, 2025, TANC approved Resolution 2025-05 and subsequently TANC entered into a Management Services Agreement with HVT Consulting, LLC under which its designated employee – Mr. Cory Danson would begin serving as the TANC Contract Executive/General Manager of TANC beginning on July 1, 2025; and

WHEREAS, the General Manager is vested with the power and authorities delegated by the TANC Commission to manage the affairs of TANC in accordance with Commission policy, the adopted budget, and the resolutions, indentures, agreements, laws, regulations, and lawful orders that apply; and

WHEREAS, the power and authority to manage the affairs of TANC needs to be delegated to HVT Consulting, LLC, acting through its designated employee Mr. Cory Danson, and such power and authority currently vested in Roukema Consulting LLC needs to be terminated.

NOW, THEREFORE, BE IT HEREBY RESOLVED by the Commission of the Transmission Agency of Northern California that the power and authority of the General Manager is hereby vested in HVT Consulting, LLC, acting through its designated employee Mr. Cory Danson, the new Contract Executive/General Manager of TANC, as of July 1, 2025, and such power and authority shall continue until it is terminated by the TANC Commission or the Management Services Agreement with HVT Consulting, LLC expires or is terminated, at which time such power and authority shall terminate.

BE IT FURTHER RESOLVED that the same power and authority would also remain vested in the TANC Commission Chair.

BE IT FURTHER RESOLVED that the power and authority would also remain vested in the TANC Interim General Manager through July 1, 2025, at which time such power and authority shall terminate.

PASSED AND ADOPTED this 21<sup>st</sup> day of May 2025, on a motion by \_\_\_\_\_ and seconded by \_\_\_\_\_.

AYES      NOES      ABSTAIN      ABSENT

City of Alameda

City of Biggs

City of Gridley

City of Healdsburg

City of Lodi

City of Lompoc

Modesto Irrigation District

City of Palo Alto

Plumas-Sierra Rural Electric Cooperative

City of Redding

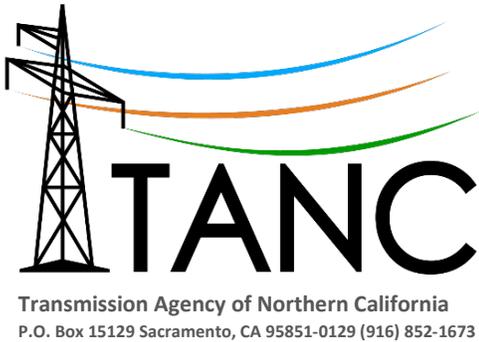
City of Roseville

Sacramento Municipal Utility District

City of Santa Clara

Turlock Irrigation District

City of Ukiah



## MEMORANDUM

DATE: May 14, 2025

TO: TANC Commission

FROM: John Roukema  
Interim General Manager

SUBJECT: RESOLUTION APPROVING AN INCREASE IN THE COTP ENTITLEMENT FOR WAPA

---

During the development of the California-Oregon Transmission Project (COTP) in the early 1990's, the Western Area Power Administration (WAPA) was awarded certain megawatts (MWs) of COTP entitlement. Initially, WAPA was awarded 100 MWs of entitlement for assets related to the existing 230 kilovolt line running from Olinda to Tracy which was the upgrade section for the COTP. Soon thereafter WAPA requested another 50 MWs of entitlement for monies spent on land acquisition related to the project, and in total this 150 MWs became WAPA's entitlement under provisions of the Interim Participation Agreement.

During the final stages of negotiation, WAPA requested an additional 100 MWs of entitlement to the COTP. As Project Manager of the COTP, the Transmission Agency of Northern California (TANC), in reviewing its own needs, agreed to negotiate with WAPA a layoff for this amount *scheduling* rights.

As such, TANC agreed to layoff 73 MWs of its COTP entitlement through 2004 and 27 MWs of entitlement to WAPA for the life of the COTP. The 73 MWs came from the City of Redding and the Turlock Irrigation District while the 27 MWs were taken from TANC members pro-rata. The 73 MW portion terminated in 2004. However, the 27 MW "partial" layoff remains in effect and TANC retains ownership of this 27 MWs with WAPA paying TANC a monthly "rent" amount as outlined in Contract No. 93-SAO-00009.

A Public Entity whose Members include:  
Alameda, Biggs, Gridley, Healdsburg, Lodi, Lompoc, Modesto Irrigation District,  
Palo Alto, Plumas-Sierra Rural Electric Cooperative, Redding, Roseville,  
Sacramento Municipal Utility District, Santa Clara, Turlock Irrigation District, Ukiah

Recently, the California-Oregon Intertie (COI) received authorization for a new rating, increasing the transfer capability of COI from 4,800 MWs to 5,100 MWs. This new rating resulted in the COTP increasing from 1,600 MWs to 1,700 MW's. At the January 29, 2025 TANC Commission meeting a table indicating new shares of this capacity by Member was provided. At the time staff was under the impression that the 27 MW Agreement between TANC and WAPA was not applicable for additional adjustments if there happened to be a betterment on the COTP.

On March 7, 2025 WAPA contacted TANC's Special Counsel indicating their 27 MW COTP share should increase by the percentage outlined in the TANC-WAPA 27 MW Agreement which, based upon a 1,700 MW COTP entitlement capacity, result in an additional share of two MWs for WAPA. TANC asked Special Counsel to review the contract and they determined that WAPA was correct and should be awarded the two additional MWs moving them to 29 MW's of COTP entitlement.

In review of TANC member shares and resent events of member purchases of transmission capacity, it is suggested the two largest TANC entitlement holders concede one MW each of COTP scheduling rights to WAPA. Those two members are the Sacramento Municipal Utility District (SMUD) and the Modesto Irrigation District (MID).

Attached Table 1 identifies the new proposed entitlement and scheduling rights for COTP Participants. As shown the effect of the two MW movement would provide for:

- SMUD – move from 525 to 559 MW's and then back one MW to 558 for a net increase of 33 MWs
- MID– move from 320 to 341 MW's and then back one MW to 340 for a net increase of 20 MWs
- WAPA – move from 177 to 186 MW's and then up two MWs to 188 for a net increase of 11 MWs

To the extent the TANC Commission agrees with this new table, the attached resolution provides direction and guidance to the Interim General Manager to potentially modify the 27 MW TANC-WAPA Agreement to the extent necessary and make additional adjustments to implement these revisions with Open Access Technology International, Inc. and related TANC scheduling templates.

Enclosures

RESOLUTION 2025-\_\_

A RESOLUTION OF THE  
TRANSMISSION AGENCY OF NORTHERN CALIFORNIA  
APPROVING AN INCREASE IN COTP ENTITLEMENT FOR WAPA

WHEREAS, the Transmission Agency of Northern California (TANC) is a joint exercise of powers agency organized under the laws of the State of California; and

WHEREAS, TANC is Project Manager for the California-Oregon Transmission Project (COTP) and has recently moved from a total megawatt (MW) capacity from 1,600 MW to 1,700 MW; and

WHEREAS, there has been a re-allocation of COTP entitlement between COTP Participants including TANC and TANC Members, and the Western Area Power Administration (WAPA); and

WHEREAS, TANC and WAPA entered into a contractual arrangement in 1993 (WAPA Contract No. 93-SAO-0009) providing for a Partial Assignment of 27 MW of TANC COTP scheduling rights to WAPA from TANC Members; and

WHEREAS, in moving to 1,700 MW of COTP capacity WAPA is entitled to another two MW's via Contract No. 93-SAO-0009 providing WAPA a total of 29 MW's; and

WHEREAS, upon review of existing TANC Member COTP scheduling rights it has been determined to take one MW of scheduling rights from the Sacramento Municipal Utility District and one MW from the Modesto Irrigation District in order to meet the additional two MW requirement for WAPA; and

NOW, THEREFORE, BE IT HEREBY RESOLVED by the Commission of the Transmission Agency of Northern California that one MW of scheduling rights from the Sacramento Municipal Utility District and one MW from the Modesto Irrigation District are transferred to the Western Area Power Administration for a total of two MW's.

BE IT FURTHER RESOLVED that to the extent required, the TANC General Manager or the TANC Chair is authorized to enter into revision of Contract No. 93-SAO-00009.

PASSED AND ADOPTED this 21<sup>st</sup> day of May 2025 on a motion by \_\_\_\_\_  
seconded by \_\_\_\_\_.

AYES      NOES      ABSTAIN      ABSENT

City of Alameda

City of Biggs

City of Gridley

City of Healdsburg

City of Lodi

City of Lompoc

Modesto Irrigation District

City of Palo Alto

Plumas-Sierra Rural Electric Cooperative

City of Redding

City of Roseville

Sacramento Municipal Utility District

City of Santa Clara

Turlock Irrigation District

City of Ukiah

1  
2  
3  
4                                   **AGREEMENT BETWEEN**  
5                                   **THE WESTERN AREA POWER ADMINISTRATION**  
6                                   **AND THE TRANSMISSION AGENCY OF NORTHERN CALIFORNIA**  
7                                   **FOR PARTIAL ASSIGNMENT OF ENTITLEMENT**  
8                                   **IN THE**  
9                                   **CALIFORNIA-OREGON TRANSMISSION PROJECT**  
10                                   **(27 MW)**

11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21   1.    PARTIES

22           This Agreement is made this 12<sup>th</sup> of Feb, 1993, pursuant to the Acts of Congress  
23           approved June 17, 1902, (32 Stat. 388); August 26, 1937, (50 Stat. 844, 850); August 4, 1939,  
24           (53 Stat. 1187); August 4, 1977, (91 Stat. 565); July 16, 1984, (98 Stat. 403, 416); August 15,  
25           1985, (99 Stat. 293, 321); and Acts amendatory or supplementary to the foregoing Acts,  
26           between the UNITED STATES OF AMERICA, acting by and through the Administrator,  
27           Western Area Power Administration, Department of Energy, hereinafter referred to as  
28           Western, represented by the officer executing this Agreement or a duly appointed  
          successor, and the Transmission Agency of Northern California, a joint powers agency,  
          duly organized and existing under and by virtue of the laws of the State of California,  
          hereinafter referred to as TANC, its successors and assigns; hereinafter also referred to  
          individually as "Party" or collectively as "Parties."

29  
30  
31   2.    RECITALS

32           This Agreement is made with reference to the following facts, among others:

- 33           2.1       Western is a Federal power marketing agency, engaged in the marketing of  
34                   power from the Central Valley Project and other sources, and is a Participant  
35                   in the California-Oregon Transmission Project (COTP or Project);  
36           2.2       TANC is also a Participant in the Project and is the Project Manager;  
37           2.3       The California-Oregon Transmission Project Interim Participation Agreement  
38                   (IPA) was executed by TANC, Western and other Project Participants on  
                  September 30, 1991;

1 2.4 Western has requested from TANC and TANC is willing to make a Partial  
2 Assignment to Western of 1.6875 percent Entitlement (approximately 27 MW)  
3 in the Project under the terms and conditions of this Agreement.

4 2.5 Such additional 1.6875 percent Entitlement shall be subject to modification if  
5 and upon the date the California Department of Water Resources (CDWR)  
6 exercises its option to purchase up to 6.0417 percent Entitlement in the Project  
7 in accordance with the IPA; and

8 2.6 This Agreement is intended to satisfy the obligation contained in Letter of  
9 Agreement (LOA) No. 91-SAO-10102 dated December 18, 1991, between  
10 Western and TANC which provides for development of a long-term agreement  
11 that embodies the provisions of the LOA.

12  
13 3. AGREEMENT

14 The Parties agree to the terms and conditions set forth herein.  
15

16 4. EFFECTIVE DATE, TERM, TERMINATION, AND EFFECTS OF TERMINATION

17 4.1 This Agreement shall become effective when it has been executed by both  
18 Parties and the condition set forth in Section 6.1 has been satisfied, and shall  
19 terminate on the termination date of the IPA unless terminated in accordance  
20 with Section 4.2 or Section 8.2.

21 4.2 TANC may terminate this Agreement upon ninety (90) days advance written  
22 notice if Western proposes to assign the rights and/or obligations under this  
23 Agreement to any entity, either public or private, for a period longer than six  
24 (6) months. TANC may also terminate this Agreement upon ninety (90) days  
25 advance written notice if Western, its functions, or property used in connection  
26 herewith, are transferred to another entity, either public or private.

27 4.3 Upon termination of this Agreement all rights associated with the Partial  
28 Assignment provided for in Section 6 shall revert to TANC and Western's

1 payment obligations associated therewith shall cease; provided that any  
2 obligations previously incurred in accordance with this Agreement, including  
3 any obligation incurred prior to termination, to pay money shall be preserved  
4 until satisfied.

5  
6 5. DEFINITIONS

7 Whenever used in this Agreement, the various terms, when initially capitalized, shall  
8 have the following meanings. The singular of any definition shall include the plural and  
9 the plural shall include the singular.

10 5.1 Assignment or Assign

11 Any voluntary permanent transfer of, or to voluntarily transfer, permanently,  
12 all rights, title, interests and obligations pertaining to all or a portion of a  
13 Participant's share of the Project.

14 5.2 Capital Improvement

15 Any addition or replacement, the cost of which exceeds two hundred fifty  
16 thousand dollars (\$250,000) or such other amount which the Management  
17 Committee may establish from time to time, or a betterment.

18 5.3 Cost Sharing Percentage

19 Those percentages which reflect each Participant's obligation to pay Project  
20 Costs as set forth in the IPA.

21 5.4 Entitlement

22 A Participant's right to use its portion of the Rated COTP Transfer Capability,  
23 expressed as a percent (%), as set forth in the IPA.

24 5.5 IPA

25 The term "IPA", when used in this Agreement, means either: (i) the California-  
26 Oregon Transmission Project Interim Participation Agreement executed by  
27 TANC, Western, and other Project Participants on September 30, 1991, or (ii)  
28 any superseding agreement, whichever is in effect.

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28

5.6 Late Charge

That charge against unpaid amounts due and owing, assessed at an annual interest rate compounded monthly equal to the lesser of the following amounts: two percent (2%) plus the applicable first of the month reference rate of the Bank of America N.T. & S.A., San Francisco, California, or its successor, corresponding to the period during which the payment is overdue; or the maximum interest rate permitted by law.

5.7 Partial Assignment or Partially Assign

Any voluntary temporary transfer of any rights or obligations in the Project, which is not an Assignment or a layoff, or to voluntarily transfer, temporarily, rights or obligations in the Project.

5.8 Project

The California-Oregon Transmission Project, consisting of land rights, transmission lines, substations, and related facilities, including, but not limited to, the following major elements plus all replacements, additions, and betterments: Northern Segment, Olinda Substation, CVP Upgrade Segment, Maxwell Compensation Station, Tracy Substation Expansion, Tesla By-Pass Segment, and metering and communication facilities.

6. PARTIAL ASSIGNMENT FROM TANC TO WESTERN

As soon as practicable upon execution of this Agreement, TANC shall make a Partial Assignment of 1.6875 percent of Entitlement (approximately 27 MW) to Western. Such Partial Assignment shall be made in accordance with this Section 6 and shall comply with the requirements of the IPA.

6.1 The Partial Assignment is conditioned upon, and shall become effective only upon, Western receiving the consent of the other Participants, if required, in accordance with the IPA.

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28

6.2 TANC shall transfer to Western, and Western shall assume, all rights and obligations associated with the Partial Assignment of the 1.6875 percent Entitlement in consideration for Western making payments in accordance with Section 7; provided that TANC shall retain ownership of such 1.6875 percent Entitlement.

6.3 Western's cost obligations for the Partial Assignment of the 1.6875 percent Entitlement shall be based upon TANC's costs as set forth in Sections 6.3.1 and 6.3.2 associated with the Partial Assignment of 1.6875 percent Entitlement.

6.3.1 For the first thirty (30) years of this Agreement, Western's cost obligation associated with TANC's financing of the 1.6875 percent Partial Assignment shall include TANC's actual principal and interest costs, including any applicable premiums and discounts, on TANC's taxable bonds or taxable commercial paper, and all costs of issuance and interest associated with these instruments of indebtedness amortized over a thirty (30) year period; and shall also include TANC's costs of administration, operation and maintenance, annualized costs of any Capital Improvements, and taxes, if any, associated with the 1.6875 percent Partial Assignment.

6.3.2 Beginning with the thirty-first (31st) year of this Agreement and continuing through the term of this Agreement, Western's cost obligation shall be based on TANC's costs of administration, operation and maintenance, annualized costs of any Capital Improvements, and taxes, if any, associated with the 1.6875 percent Partial Assignment.

6.4 In accordance with the IPA, the 1.6875 percent Partial Assignment, and Western's payment obligation associated therewith to the extent that this Partial Assignment is reduced below 1.6875 percent, shall be reduced proportionately

1 with other Entitlements if and upon the date the CDWR exercises its option to  
2 purchase up to 6.0417 percent Entitlement in the Project.

3 6.5 TANC shall make a good faith effort in the future to Partially Assign to  
4 Western up to an additional 4.5625 percent of Entitlement (approximately  
5 73 MW) in addition to the Partial Assignment as provided for herein; provided  
6 that any available TANC Entitlement must be offered first to the members of  
7 TANC. Any such additional Partial Assignment shall be made upon such  
8 terms and conditions as may be agreed upon at that time by the Parties;  
9 provided that such additional Partial Assignment shall be reduced  
10 proportionately with other Entitlements if and upon the date the CDWR  
11 exercises its option to purchase up to 6.0417 percent Entitlement in the Project.  
12

13 7. COMPENSATION

14 7.1 TANC Partial Assignment to Western

15 7.1.1 In consideration for the Partial Assignment made in accordance with  
16 Section 6, Western shall make monthly payments, to TANC or its  
17 successor, based upon a thirty (30) year fully amortized payment  
18 schedule to recover all of TANC's costs pursuant to Section 6.3. Prior  
19 to September 1 of each year, TANC shall submit to Western an  
20 estimate of the costs TANC expects to incur pursuant to Section 6.3,  
21 including any adjustments necessary to account for the difference  
22 between TANC's actual costs incurred pursuant to Section 6.3 and  
23 payments received from Western during the previous calendar year.  
24 The monthly charges during 1993 shall be based upon an estimate  
25 provided to Western by TANC upon execution of this Agreement.  
26 Such estimate shall serve as the basis for the monthly invoices issued  
27 by TANC to Western pursuant to Section 7.1.2 commencing on  
28 January of the succeeding calendar year. An example of the format

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28

for presenting the costs to be incurred by TANC pursuant to Section 6.3 is set forth in Appendix A to this Agreement.

7.1.2 TANC shall issue monthly invoices for payments in accordance with Section 7.1.1 on or before the fifth (5th) day of each month. Western shall pay the full amount of such invoice on or before the first (1st) day of the succeeding month regardless of any dispute which may exist as to any part of such invoice. Any amounts owed and not paid in full by the due date shall thereafter accrue a Late Charge from the date the payment is due until the date such payment is made.

7.1.3 Subject to mutual agreement of the Parties, net billing and/or bill crediting arrangements for the monthly invoices hereunder may be utilized.

7.2 Disputed Billings

Western may dispute any invoice rendered in accordance with Section 7.1. In any event, Western shall pay the full amount of such bill and notify TANC of the amount of the dispute and the reason therefor. TANC and Western shall meet within ten (10) business days to resolve such dispute. If the billing is found to be in error, the Parties shall reconcile any overpayment or underpayment promptly. If the Parties are unable to resolve such dispute, the dispute shall first be brought before both the Chairman of TANC and the Area Manager of Western for resolution. If the Chairman of TANC and the Area Manager of Western are unable to resolve the dispute within ninety (90) days, the Parties shall have the right to pursue resolution of the dispute by any other means including, but not limited to, arbitration or litigation.

1 8. MONETARY DEFAULT

2 Western shall be in monetary default of this Agreement when and if it fails to make  
3 payments in accordance with Section 7.

4 8.1 To the extent Western does not cure or is unable to cure a monetary default  
5 within the first sixty (60) days following the date payment is due in accordance  
6 with Section 7.1, Western's rights and obligations in accordance with this  
7 Agreement shall be suspended except Western's obligation to pay costs  
8 incurred prior to suspension.

9 8.2 To the extent Western does not cure or is unable to cure a monetary default  
10 within the first one-hundred eighty (180) days following the date payment is  
11 due in accordance with Section 7.1, Western's rights in accordance with this  
12 Agreement, except its obligation to pay all monies related to the monetary  
13 default incurred prior to its termination, shall revert to TANC.

14  
15 9. SEVERABILITY

16 In the event that any term, covenant, or condition of this Agreement or the application  
17 of any such term, covenant, or condition shall be held invalid as to any person, entity,  
18 or circumstance by any court or agency having jurisdiction, such term, covenant, or  
19 condition shall remain in force and effect to the maximum extent permitted by law, and  
20 all other terms, covenants, and conditions of this Agreement and their application shall  
21 not be affected thereby but shall remain in force and effect unless a court or agency holds  
22 that such provisions are not separable from all other provisions of this Agreement.

23  
24 10. LIABILITY

25 10.1 Except for damage or loss resulting from willful misconduct, gross negligence,  
26 or breach of fiduciary obligation in connection with this Agreement, neither  
27 Party, its members, directors, members of its governing body, officers, or  
28

1 employees shall be liable to the other Party for any loss or damage in  
2 connection with this Agreement.

3 10.2 Each Party shall be responsible for the consequences of its own willful  
4 misconduct, gross negligence, and breach of fiduciary obligation in connection  
5 with this Agreement, and in connection with any work undertaken in  
6 accordance with this Agreement, and shall indemnify, defend, and hold  
7 harmless the other Party, their members, directors, members of their governing  
8 bodies, officers, and employees from the consequences thereof to the extent  
9 allowed by law. Nothing in this Section 10 shall require either Party to obtain  
10 insurance covering the willful action, gross negligence, or breach of fiduciary  
11 obligation of the other Party.

12 10.3 The provisions of this Section 10 shall not be construed to relieve any insurer  
13 of its obligation to pay any insurance proceeds in accordance with the terms  
14 and conditions of valid and enforceable insurance policies.

15 10.4 The provisions of this Section 10 do not in any way diminish Western's  
16 obligations under Sections 7, 8, and 9 of this Agreement.

17  
18 11. WAIVERS

19 Any waivers at any time by either Party to this Agreement of its rights with respect to  
20 a default or any other matter arising under or in connection with this Agreement shall  
21 not be deemed a waiver with respect to any subsequent default or matter.

22  
23 12. CONTINGENT UPON APPROPRIATIONS

24 The Parties recognize that continued expenditures by the United States are contingent  
25 upon Congress making the necessary appropriations required for the continued  
26 performance of the United States' rights and obligations under this Agreement. Western  
27 agrees that it will recommend that Congress make appropriations sufficient to fulfill the  
28 obligations of the United States hereunder. In case such appropriation is not made, and

1 Western fails to make the payments required under Section 7.1, Western shall be  
2 considered to be in monetary default. The contractual rights and obligations of the  
3 United States shall then be suspended or terminated in accordance with Section 8, and  
4 any transmission capability assigned to Western under this Agreement shall revert to  
5 TANC. However, TANC hereby relieves the United States from monetary liability due  
6 to the failure of Congress to make such appropriation.  
7

8 13. OFFICIALS NOT TO BENEFIT

9 No member of or delegate to Congress or resident commissioner shall be admitted to any  
10 share or part of this Agreement or to any benefit that may have arisen therefrom.  
11

12 14. COVENANT AGAINST CONTINGENT FEES

13 The Parties warrant that no person or selling agency has been employed or retained to  
14 solicit or secure this Agreement upon an agreement or understanding for a commission,  
15 percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide  
16 established commercial or selling agencies maintained by the parties for the purpose of  
17 securing business. For breach or violation of this warranty, Western shall have the right  
18 to withdraw from this Agreement without liability or, in its discretion, to deduct from  
19 the contract price or consideration the full amount of such commission, percentage,  
20 brokerage, or contingent fee.  
21

22 15. CONTRACT WORK HOURS AND SAFETY STANDARDS

23 This Agreement, to the extent that it is of a character specified in Section 103 of the  
24 Contract Work Hours and Safety Standards Act (Act), 40 U.S.C.A. Section 329 (1986), is  
25 subject to the provisions of the Act, 40 U.S.C.A. Sections 327 - 333 (1986), and to  
26 regulations promulgated by the Secretary of Labor pursuant to the Act.  
27  
28

1 16. EQUAL OPPORTUNITY EMPLOYMENT PRACTICES

2 Section 202 of Executive Order No. 11246, 43 Fed. Reg. 46501 (1978), which provides,  
3 among other things, that the Parties will not discriminate against any employee or  
4 applicant for employment because of race, color, religion, sex, or national origin, is  
5 incorporated by reference in this Agreement.

6  
7 17. USE OF CONVICT LABOR

8 The Parties agree not to employ any person undergoing sentence of imprisonment in  
9 performing work under this Agreement except as provided by 18 U.S.C. 4082(c)(2) and  
10 Executive Order 11755, December 29, 1973.

11  
12 18. INTEGRATION

13 18.1 This Agreement constitutes the complete and final expression of the agreement  
14 between the Parties and is a complete and exclusive statement of the terms of  
15 their agreement, and supersedes all prior and contemporaneous offers,  
16 promises, representations, negotiations, discussions, and communications  
17 which may have been made in connection with the subject matter of this  
18 Agreement. This Agreement is the product of negotiations and neither  
19 ambiguities nor uncertainties shall, therefore, be construed in a manner which  
20 is prejudicial to either Party.

21 18.2 Appendix A is attached hereto and made a part of this Agreement and shall  
22 remain in effect until superseded by mutual agreement of the Parties.

23  
24 19. AMENDMENT

25 This Agreement may be amended only by a written instrument duly executed by the  
26 Parties hereto. Revisions to Appendix A to this Agreement shall be made by mutual  
27 agreement of the Parties, and shall not constitute an amendment to this Agreement.  
28

1 20. GOVERNING LAW

2 This Agreement is made and entered into in the State of California. Interpretation of this  
3 Agreement, and performance and enforcement thereof, shall be determined in accordance  
4 with California law to the extent applicable, and otherwise in accordance with federal  
5 law, as if performed within the State of California.

6  
7 21. NOTICES

8 Any notice, demand or request in accordance with this Agreement shall be in writing and  
9 shall be deemed properly served, given, or made if delivered in person or sent by first  
10 class United States mail, postage prepaid, by a confirmed electronic facsimile, or by  
11 prepaid commercial courier service to the other Party.

12  
13 22. NO PRECEDENTS

14 Nothing contained in this Agreement shall be construed to establish any precedent for  
15 any other agreement, or to grant any rights to or impose any obligations on either Party,  
16 beyond the scope and term of this Agreement.

17  
18 23. AUDITS

19 Either Party shall have the right to audit and to examine any cost, payment, settlement  
20 or supporting documentation related to any cost incurred or payment or credit given  
21 pursuant to this Agreement. Any such audit shall be at the requesting Party's expense  
22 and undertaken by such Party or its representatives at reasonable times and in  
23 conformance with generally accepted auditing standards. The right to audit shall extend  
24 for a period of three (3) years following the rendering of the bill or the payment or  
25 crediting of the cost incurred in accordance with this Agreement. Consistent with the  
26 requirement of keeping Project records, each Party shall retain all necessary records or  
27 documentation for the entire length of the audit period.

28

1 24. SIGNATURE CLAUSE

2 The signatories to this Agreement represent that they have been appropriately authorized  
3 to enter into this Agreement on behalf of the Party for whom they sign.

4  
5 WESTERN AREA POWER ADMINISTRATION

6 By: James C. Feiler

7 Title: Area Manager

8 Attest:

9 By: [Signature]

10 Date: 2-12-93

11 Its: Secretary

12 Address: 1825 Bell Street, Suite 105

13 Sacramento, CA 95825

14  
15 TRANSMISSION AGENCY

16 OF NORTHERN CALIFORNIA

17 By: [Signature]

18 Title: Chairman

19 Attest:

20 By: Harold S. Kaplan

21 Date: \_\_\_\_\_

22 Its: Attorney

23 Address: P. O. Box 15129

24 Sacramento, CA 95851-0129

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28

**APPENDIX A**  
**COST ALLOCATION**  
**ASSOCIATED WITH THE TANC/WESTERN 27 MW TRANSMISSION AGREEMENT**

TANC shall bill Western on a monthly basis in accordance with the following formula:

Western Monthly Bill =  $A * ( B + C + D + E )$

where:

- A = Western's pro-rata share of TANC's taxable share of COTP Entitlement in megawatts.
- B = TANC's total monthly cost, on a taxable basis, of principal and interest related to the investment in the COTP.
- C = TANC's total monthly cost for operations and maintenance associated with TANC's taxable share of COTP Entitlement .
- D = TANC's total monthly cost for administrative and general expenses associated with TANC's taxable share of COTP.
- E = TANC's total monthly cost for additions and betterments associated with TANC's taxable share of COTP Entitlement.

The cost components, as described above, may be updated each month and billed accordingly. If TANC, at any time during the term of this Agreement, no longer has costs on a taxable basis related to the COTP, then the costs used in the above formula shall represent TANC's average costs on a tax-exempt basis.

For illustrative purposes, there is a table attached to this Appendix A which shows sample calculations. The Parties agree that the table is only provided for illustrative purposes and that the actual costs may vary.

APPENDIX A

03-Feb-93

**COST ALLOCATION**  
**ASSOCIATED WITH THE TANC/WESTERN 27 MW TRANSMISSION AGREEMENT**  
*Example based on TANC's Taxable Share of COTP Entitlement (279 MW)*

TANC COTP Cost Responsibility: Taxable Share						Western 27 MW Total Cost Responsibility [5]
A COTP Principal and Interest [1]	B COTP Operations and Maintenance [2]	C TANC Administration and General [3]	D COTP Additions and Betterments [4]	E TANC Taxable Total Cost Responsibility	F	
FY 1993	\$8,059,658	\$1,064,551	\$213,776	\$0	\$9,337,985	\$903,676
1994	\$8,059,658	\$967,369	\$224,465	\$0	\$9,251,491	\$895,306
1995	\$8,059,658	\$1,011,378	\$235,688	\$0	\$9,306,724	\$900,651
1996	\$8,059,658	\$1,057,587	\$247,473	\$0	\$9,364,718	\$906,263
1997	\$8,059,658	\$1,093,711	\$259,847	\$0	\$9,413,215	\$910,956
1998	\$8,059,658	\$1,148,396	\$272,839	\$114,840	\$9,595,732	\$928,619
1999	\$8,059,658	\$1,205,816	\$286,481	\$120,582	\$9,672,536	\$936,052
2000	\$8,059,658	\$1,266,107	\$300,805	\$126,611	\$9,753,180	\$943,856
2001	\$8,059,658	\$1,329,412	\$315,845	\$132,941	\$9,837,856	\$952,051
2002	\$8,059,658	\$1,395,883	\$331,637	\$139,588	\$9,926,766	\$960,655
2003	\$8,059,658	\$1,465,677	\$348,219	\$146,568	\$10,020,121	\$969,689
2004	\$8,059,658	\$1,538,961	\$365,630	\$153,896	\$10,118,145	\$979,175
2005	\$8,059,658	\$1,615,909	\$383,912	\$161,591	\$10,221,069	\$989,136
2006	\$8,059,658	\$1,696,704	\$403,107	\$169,670	\$10,329,140	\$999,594
2007	\$8,059,658	\$1,781,539	\$423,263	\$178,154	\$10,442,614	\$1,010,576
2008	\$8,059,658	\$1,870,616	\$444,426	\$187,062	\$10,561,761	\$1,022,106
2009	\$8,059,658	\$1,964,147	\$466,647	\$196,415	\$10,686,867	\$1,034,213
2010	\$8,059,658	\$2,062,355	\$489,979	\$206,235	\$10,818,227	\$1,046,925
2011	\$8,059,658	\$2,165,472	\$514,478	\$216,547	\$10,956,156	\$1,060,273
2012	\$8,059,658	\$2,273,746	\$540,202	\$227,375	\$11,100,980	\$1,074,288
2013	\$8,059,658	\$2,387,433	\$567,212	\$238,743	\$11,253,047	\$1,089,005
2014	\$8,059,658	\$2,506,805	\$595,573	\$250,680	\$11,412,716	\$1,104,456
2015	\$8,059,658	\$2,632,145	\$625,352	\$263,215	\$11,580,369	\$1,120,681
2016	\$8,059,658	\$2,763,752	\$656,619	\$276,375	\$11,756,405	\$1,137,717
2017	\$8,059,658	\$2,901,940	\$689,450	\$290,194	\$11,941,242	\$1,155,604
2018	\$8,059,658	\$3,047,037	\$723,923	\$304,704	\$12,135,321	\$1,174,386
2019	\$8,059,658	\$3,199,389	\$760,119	\$319,939	\$12,339,104	\$1,194,107
2020	\$8,059,658	\$3,359,358	\$798,125	\$335,936	\$12,553,077	\$1,214,814
2021	\$8,059,658	\$3,527,326	\$838,031	\$352,733	\$12,777,748	\$1,236,556
2022	\$8,059,658	\$3,703,693	\$879,933	\$370,369	\$13,013,652	\$1,259,386
2023	\$8,059,658	\$3,888,877	\$923,929	\$388,888	\$13,261,352	\$1,283,357

2024	\$8,059,658	\$4,083,321	\$970,126	\$408,332	\$13,521,436	\$1,308,526
2025	\$0	\$4,287,487	\$1,018,632	\$428,749	\$5,734,868	\$554,987
2026	\$0	\$4,501,862	\$1,069,564	\$450,186	\$6,021,611	\$582,737
2027	\$0	\$4,726,955	\$1,123,042	\$472,695	\$6,322,692	\$611,873
2028	\$0	\$4,963,302	\$1,179,194	\$496,330	\$6,638,826	\$642,467
2029	\$0	\$5,211,467	\$1,238,154	\$521,147	\$6,970,768	\$674,590
2030	\$0	\$5,472,041	\$1,300,061	\$547,204	\$7,319,306	\$708,320
2031	\$0	\$5,745,643	\$1,365,064	\$574,564	\$7,685,271	\$743,736
2032	\$0	\$6,032,925	\$1,433,317	\$603,292	\$8,069,536	\$780,923
2033	\$0	\$6,334,571	\$1,504,983	\$633,457	\$8,473,012	\$819,969
2034	\$0	\$6,651,300	\$1,580,233	\$665,130	\$8,896,662	\$860,967
2035	\$0	\$6,983,865	\$1,659,244	\$698,386	\$9,341,495	\$904,016
2036	\$0	\$7,333,058	\$1,742,206	\$733,306	\$9,808,570	\$949,216
2037	\$0	\$7,699,711	\$1,829,317	\$769,971	\$10,298,999	\$996,677
2038	\$0	\$8,084,696	\$1,920,783	\$808,470	\$10,813,949	\$1,046,511
2039	\$0	\$8,488,931	\$2,016,822	\$848,893	\$11,354,646	\$1,098,837
2040	\$0	\$8,913,378	\$2,117,663	\$891,338	\$11,922,378	\$1,153,779
2041	\$0	\$9,359,047	\$2,223,546	\$935,905	\$12,518,497	\$1,211,467
2042	\$0	\$9,826,999	\$2,334,723	\$982,700	\$13,144,422	\$1,272,041
2043	\$0	\$10,318,349	\$2,451,459	\$1,031,835	\$13,801,643	\$1,335,643
<b>TOTAL</b>	<b>\$257,909,043</b>	<b>\$198,912,000</b>	<b>\$47,205,118</b>	<b>\$19,371,741</b>	<b>\$523,397,901</b>	<b>\$50,651,410</b>

#### NOTES

- [1] COTP Principal and Interest calculation assumes: (1) \$420,000,000 total Project Cost; (2) 279 MW taxable portion valued at \$78,120,000 (based on 1500 MW cost responsibility); (3) cost of funds at 3 percent greater than TANC's total interest cost for its tax-exempt COTP Revenue Bonds, 1992 Series A (i.e. an imputed taxable rate of 9.67 percent); and (4) a term of 30 years (annual payment).
- [2] COTP Operations and Maintenance costs for FY93 through FY97 are estimated based on Project Cost estimates (calendar year) provided by Project Staff. The O&M are pro rata (279/1600) to reflect TANC's taxable share of the cost responsibility of future O&M expenses. O&M costs beyond calendar year 1997 include an estimated escalation of 5 percent.
- [3] TANC's Administrative and General costs for the taxable component are pro rata (279/1279) based on TANC's current Administrative and General costs, and assume an estimated escalation of 5 percent per year for the life of the Project.
- [4] COTP Additions and Betterments are estimated as a percentage (.10) of annual O&M costs.
- [5] Western Area Power Administration (Western) 27 MW Total Cost Responsibility (Column F) equals 27/279 of the "TANC Taxable Total Responsibility" (Column E). Western Area Power Administration's Monthly Charge equals the following:

Column F: "Western 27 MW Total Cost Responsibility" (Annual)  
12 Months \*\*

\*\* Partial years to be prorated monthly.

# COI Rating of 5,100MW/COTP Rating of 1,700MW

## Current (Entitlement and Scheduling)

TANC Member	Member Percentage	Member MW Entitlement (North to South)	MW Scheduling Rights (North to South)
SMUD	37.8074%	535.7303	525
MID	23.0546%	326.6840	320
TID	17.1458%	242.9555	238
Santa Clara	9.8108%	139.0186	137
Redding	10.0398%	142.2639	140
Roseville	2.1416%	30.3476	30
Alameda	0.0000%	-	-
Healdsburg	0.0000%	-	-
Lodi	0.0000%	-	-
Lompoc	0.0000%	-	-
Palo Alto	0.0000%	-	-
Plumas	0.0000%	-	-
Ukiah	0.0000%	-	-
<b>Total</b>	<b>100.0000%</b>	<b>1,417.0000</b>	<b>1,390</b>

## New (Entitlement and Scheduling)

TANC Member	Member Percentage	Member MW Entitlement (North to South)	MW Scheduling Rights 27 MW WAPA	MW Scheduling Rights 29 MW WAPA
SMUD	37.8074%	569.2140	559	558
MID	23.0546%	347.1014	341	340
TID	17.1458%	258.1407	254	254
Santa Clara	9.8108%	147.7077	145	145
Redding	10.0398%	151.1555	148	148
Roseville	2.1416%	32.2431	32	32
Alameda	0.0000%	-	-	-
Healdsburg	0.0000%	-	-	-
Lodi	0.0000%	-	-	-
Lompoc	0.0000%	-	-	-
Palo Alto	0.0000%	-	-	-
Plumas	0.0000%	-	-	-
Ukiah	0.0000%	-	-	-
<b>Total</b>	<b>100.0000%</b>	<b>1,505.5625</b>	<b>1,479</b>	<b>1,477</b>

Scheduling Rights include the 27MW layoff to WAPA

Scheduling Rights include the 29MW layoff to WAPA

COTP Participants	Participant Percentage	Participant MW Entitlement (North to South)	MW Scheduling Rights (North to South)
TANC	88.5625%	1,417.0000	1,390
Western	9.3750%	150.0000	177
PG&E	2.0625%	33.0000	33
<b>Total</b>	<b>100.0000%</b>	<b>1,600.0000</b>	<b>1,600</b>

COTP Participants	Participant Percentage	Participant MW Entitlement (North to South)	MW Scheduling Rights (North to South)	MW Scheduling Rights (North to South)
TANC	88.5625%	1,505.5625	1,479	1,477
Western	9.3750%	159.3750	186	188
PG&E	2.0625%	35.0625	35	35
<b>Total</b>	<b>100.0000%</b>	<b>1,700.0000</b>	<b>1,700</b>	<b>1,700</b>

**TAB 22**

**REPORT AND POTENTIAL ACTION ON ADMINISTRATIVE ITEMS**

The Commission will discuss and may take action as necessary on the following administrative matters.

- a. Approval of an updated Officers List for 2025

## Updated Proposed TANC Officers Calendar Year 2025

<b><u>TANC Officers</u></b>	
Chair	Nick Zettel
Vice Chair and Secretary	Martin Caballero
Interim Contract Executive/General Manager	John Roukema
Treasurer	<i>Jennifer Restivo</i>
Assistant Treasurers	Greg Pochy <i>Jon Anderson</i>
Controller	Lisa Limcaco
Assistant Controller	Mike Wilson
<b><u>General Manager's Committee Representatives</u></b>	
Audit/Budget Chair	Sondra Ainsworth
Audit/Budget -Ex Officio Member and Secretary	Larry Riegle
Contracts Chair	Basil Wong
Contracts-Ex Officio Member and Secretary	John Roukema
Finance Chair	<i>Jennifer Restivo</i>
Finance -Ex Officio Member and Secretary	Larry Riegle
Engineering & Operations (E&O) Chair	John Roukema
E&O -Ex Officio Member and Secretary	Amy Cuellar
Open Access Transmission Tariff (OATT) Chair	David Olivares
OATT -Ex Officio Member and Secretary	John Roukema
<b><u>TANC/COTP Representatives</u></b>	
COTP Management Committee (MC) Chair	John Roukema
COTP MC Ex Officio Member and Secretary	Amy Cuellar
COTP E&O Committee Chair	Steve Tuggle
COTP E&O Ex Officio Member and Secretary	John Roukema
Administrative Representative (Owners Coordinated Operating Agreement)	John Roukema
E&O Representative (Owners Coordinated Operating Agreement)	Richard Buckingham
Reclamation District 2024 Trustee	Don Wagenet

**TAB 23**

**MEETING CALENDAR**

The TANC Commission will confirm the date of its next scheduled meeting is June 18, 2025.