



- **Board of Directors**

- Engineering, Operations, and Technology Committee***

2/13/2024 Board Meeting

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7-6

## **Subject**

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Authorize amendments to two agreements for energy and transmission services with the Arizona Electric Power Cooperative, related to the termination and credits services provisions of those agreements; the General Manager has determined the proposed action is exempt or otherwise not subject to CEQA

## **Executive Summary**

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The Arizona Electric Power Cooperative (AEP CO), a generation and transmission cooperative headquartered in Benson, Arizona, performs Transmission Operations (TOP) functions and energy scheduling functions for Metropolitan's Colorado River Aqueduct Transmission System (CRATS) and five pumping stations. These functions are carried out under two agreements authorized by the Board in 2017 – the Power System Operation Services Agreement (PSOS Agreement) and the Scheduling and Trading Services Agreement (STS Agreement).

To date, Metropolitan's relationship with AEP CO has been cost-effective and beneficial for both parties. AEP CO's operators have become increasingly familiar with the CRATS and, in the summer of 2022, successfully helped Metropolitan navigate the most serious electric system emergency since the energy crisis of 2000-2001. However, recent developments in the electricity market, both nationwide and in the Southwest specifically, have increased the perceived risk profile for both AEP CO and Metropolitan. These changes include market volatility, increasingly stringent mandatory reliability compliance obligations, and the development of renewable energy and energy storage projects in preparation for a shift to a carbon-free economy. In response to these developments, and in the interest of maintaining a mutually beneficial and cost-effective relationship, Metropolitan staff and AEP CO have negotiated several key changes to the PSOS and STS agreements to mitigate some of AEP CO's perceived increased risks without directly increasing Metropolitan's costs for these services.

This action would authorize amendments to the termination provision of the PSOS Agreement and the termination and credit services provisions of the STS Agreement to address, respectively, potential future changes to the CRATS and Metropolitan's activities in California's energy markets.

## **Proposed Action(s)/Recommendation(s) and Options**

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### **Staff Recommendation: Option #1**

#### **Option #1**

Authorize amendments to the Power System Operation Services Agreement and Scheduling and Trading Services Agreement, both with the Arizona Electric Power Cooperative, related to the termination and credit services provisions of those agreements.

**Fiscal Impact:** No immediate fiscal impact.

**Business Analysis:** Approving the proposed amendment presents the risk that an unanticipated change to the North American Electric Reliability Corporation (NERC) reliability impact status of the CRATS (from low- to medium- or high-risk) could lead AEP CO to invoke the one-year termination clause, requiring Metropolitan to either (1) obtain TOP services from an alternative provider within the one-year termination window or (2) establish a TOP program within Metropolitan with the attendant added infrastructure and

personnel costs (primarily building and staffing a 24-hour control center) within the one-year termination window. Staff's assessment is that an unanticipated change to the reliability impact status of the CRATS is possible but unlikely to occur.

### **Option #2**

Do not authorize amendments to the Power System Operation Services Agreement and Scheduling and Trading Services Agreement.

**Fiscal Impact:** No immediate fiscal impact.

**Business Analysis:** There is a significant risk that failure to implement the proposed amendments to the PSOS and STS agreements will result in AEPCO invoking the three-year termination clause in the current agreement in the near-term, even in the absence of a change in NERC's categorization of the CRATS, in order to mitigate AEPCO's perceived risks. Termination would require Metropolitan to either obtain TOP services from an alternative provider within the current three-year termination window or establish a TOP in-house within that timeframe.

### **Alternatives Considered**

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Staff has been negotiating the proposed amendments with their counterparts at AEPCO for more than a year, and AEPCO's management will not accept the status quo with respect to either the termination provision in the PSOS Agreement or the Credit Services provision in the STS Agreement. Staff is currently assessing the costs, benefits, and risks of several long-term options if Metropolitan is forced to seek alternatives to the TOP services provided under the AEPCO agreements. These analytical efforts are currently underway, but they will not be completed in time to respond to AEPCO's request to implement the amendments to the PSOS and STS agreements presented in this action.

Overall, staff believes that the current agreement, with these changes, and partnership with AEPCO will continue to be beneficial to Metropolitan, with no immediate increased cost and minimal future risk.

### **Applicable Policy**

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Policy Principle on Energy/Restructuring (Minute Item 41941, June 11, 1996)

Policy Principle on Energy (Minute Item 457598, August 19, 2008)

Adoption of Energy Management Principles (Minute Item 48371, August 17, 2010)

Energy Sustainability Plan (Report No. 1630, Vol. 1, November 2020)

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

### **Related Board Action(s)/Future Action(s)**

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Board authorization of PSOS and STS Agreements and Class D membership in AEPCO (Minute Item 50885, July 11, 2017)

### **California Environmental Quality Act (CEQA)**

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#### **CEQA determination for Option #1:**

The proposed action is not defined as a project under CEQA because it involves organizational, maintenance, or administrative activities; personnel-related actions; and/or general policy and procedure making that will not result in direct or indirect physical changes in the environment. (Public Resources Code Section 21065; State CEQA Guidelines Section 15378(b)(2) and (5).)

#### **CEQA determination for Option #2:**

None required

## Details and Background

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### Background

Metropolitan owns a 230 kilovolt (kV) transmission system that provides power to its Colorado River Aqueduct (CRA) pumps. Metropolitan also has long-term contracts for energy from Hoover and Parker Dams, which is transmitted to the CRA pumps over Metropolitan's transmission lines. Additional power is procured through California's centralized energy markets or via bilateral contracts. For the thirty years prior to the approval of the AEPCO agreements, Southern California Edison (SCE) provided Metropolitan with energy and transmission services under a 1987 Service and Interchange Agreement. SCE elected not to renew this agreement in 2017 due to market changes, and following a search for a new service provider, the Board authorized the successor PSOS and STS Agreements with AEPCO.

AEPCO is a non-profit, membership-based generation and transmission cooperative established in 1961 and located in Benson, Arizona. AEPCO's Class A members are traditional Rural Electrification Agency (REA) co-operatives and participate jointly in generation and transmission projects, and are primarily responsible for AEPCO's governance. Class D members, including Metropolitan, the Central Arizona Project, and Valley Electric Association, among others, are mostly non-REA entities that receive services from AEPCO and participate in its governance to a lesser degree. AEPCO provides energy management and scheduling services through the Alliances for Cooperative Energy Services Power Marketing, LLC (ACES). AEPCO also operates 866 miles of high-voltage electric transmission lines and 625 megawatts (MW) of generation capacity, meeting the requirements of NERC mandatory electric reliability standards through their modern control center.

The STS Agreement has a term of October 1, 2017, to December 31, 2035, subject to early termination by either party with a three-year advance notice. Charges for energy and scheduling services are on a per megawatt-hour basis, with all members paying the same unit cost per megawatt-hour. The services provided to Metropolitan under the agreement include the following: (1) AEPCO registration as Metropolitan's Scheduling Coordinator with the California Independent System Operator (CAISO) and the scheduling of Metropolitan's CRA energy and transmission; (2) procurement of supplemental energy; (3) AEPCO monitoring of CRA electrical load and energy resources to assure balanced and cost-effective operations; and (4) AEPCO accounting, invoicing, and tagging of all CRA energy transactions. The STS Agreement also established an initial \$1 million interest-bearing deposit account to ensure that AEPCO has sufficient liquidity to enter into transactions on Metropolitan's behalf.

Under the PSOS Agreement, which has the same term and early termination provisions as the STS Agreement, AEPCO provides Metropolitan a variety of services to ensure that Metropolitan's facilities are operated in compliance with national electric reliability standards. AEPCO is registered with NERC as Metropolitan's Transmission Operator (TOP) and is responsible for complying with all applicable NERC TOP standards. Under the agreement, Metropolitan assumes responsibility for NERC penalties incurred by AEPCO in its role as Metropolitan's TOP, absent gross negligence or willful misconduct by AEPCO.

The combined annual cost of the services provided by AEPCO and ACES to Metropolitan is approximately \$1.3 million. Approximately two-thirds of the annual cost is for energy scheduling services provided by ACES, with the remaining third for the various TOP functions provided by AEPCO. The overall cost of the TOP and STS services are within industry norms, and save Metropolitan significant costs for both staff and infrastructure.

### Proposed Amendments to Termination Provisions in PSOS and STS Agreements

As noted, both agreements will remain in effect until December 31, 2035, unless either party chooses to terminate them earlier with a minimum advance notice of three years. In addition, the STS Agreement must remain in effect during the term of the PSOS Agreement. These provisions are reflective of Metropolitan's desire to maintain stable, long-term operating conditions for the CRATS. These termination provisions also reflect AEPCO's desire to preserve the STS Agreement in order to make its relationship with Metropolitan cost-effective.

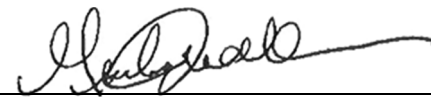
NERC classifies transmission facilities as low-, medium-, or high-impact, based on their potential to impact the Bulk Electric System (BES). AEPCO's provision of services under the PSOS Agreement is premised on NERC's current classification of the CRATS as a "low-impact" facility. Examples of medium- or high-impact systems would include those of SCE, Pacific Gas & Electric Co., and the Los Angeles Department of Water and Power. As Metropolitan's TOP, AEPCO must comply with all of the reliability standards applicable to the CRATS, and

higher impact levels result in a higher number of applicable standards and requirements, a greater expenditure of resources, and additional risk. In particular, AEPCO's existing control center would not be capable of performing the TOP function for the CRATS if it was reclassified as medium- or high-impact. Reclassification would require AEPCO to construct, staff, and operate a fully capable auxiliary control center. While there is no immediate likelihood of such a change in classification, electric upgrades of the CRATS or significant changes to the surrounding interconnected transmission grid could potentially result in such a change in the future.

Under the proposed amendment to the PSOS Agreement (see **Attachment 1**), any acquisition or modification of BES facilities by Metropolitan that elevate the impact rating of AEPCO's control centers to either medium- or high-impact facilities would trigger a consultation process. If the parties are unable to prevent the impact rating change through "commercially reasonable actions," AEPCO would "provide MWD with as much advance written notice of termination as possible, but in no event less than one (1) year." Also, due to the commercially interrelated nature of the PSOS and STS agreements, a proposed amendment to the STS Agreement (see **Attachment 2**) would permit Metropolitan to simultaneously terminate the STS Agreement if AEPCO exercises the one-year termination option in the PSOS Agreement.

#### **Proposed Amendment to Credit Services Provision in STS Agreement**

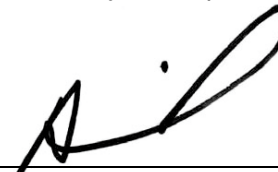
Under Section 7.3 of the STS Agreement ("Credit Services"), AEPCO is required, in consideration of the \$1 million deposit referenced above, to "use its creditworthiness and credit thresholds with its power supplying creditworthy counterparties" to make real-time, hour-ahead, and day-ahead purchases on Metropolitan's behalf. During the term of the STS Agreement, the CAISO has required AEPCO, as Metropolitan's Scheduling Coordinator, to post collateral on multiple occasions in order to facilitate Metropolitan's transactions. The proposed amendment to Section 7.3 (see **Attachment 2**) would clarify that (1) Metropolitan is responsible for any out-of-pocket costs or liability that AEPCO incurs in utilizing its creditworthiness or credit thresholds on Metropolitan's behalf and (2) AEPCO's Class A members have priority access to AEPCO's creditworthiness or credit thresholds. Staff is currently exploring mechanisms by which Metropolitan can establish creditworthiness directly with the CAISO for its transactions.



Mickey Chaudhuri  
Interim Group Manager,  
Water System Operations

1/23/2024

Date



Adel Hagekhalil  
General Manager

1/25/2024

Date

**Attachment 1 – Proposed Amendment to PSOS Agreement**

**Attachment 2 – Proposed Amendment to STS Agreement**

## FIRST AMENDMENT TO THE POWER SYSTEM OPERATION SERVICES AGREEMENT

This First Amendment to the Power System Operation Services Agreement (“**Amendment**”) is entered into this \_\_\_ day of \_\_\_\_\_, 2023, by and between Metropolitan Water District of Southern California (“**MWD**”), a governmental utility operating under the laws of the State of California, and Arizona Electric Power Cooperative, Inc. (“**AEPCO**”), a non-profit cooperative corporation organized under the generation and transmission electric cooperative laws of the State of Arizona. MWD and AEPCO are also hereinafter referred to individually as a “Party” or collectively as the “Parties.”

WHEREAS, the Parties entered into that certain Power System Operation Services Agreement dated August 28, 2017 (“**PSOS Agreement**”), whereby AEPCO provides certain power system operation services to MWD; and

WHEREAS, the Parties wish to amend the PSOS Agreement to add a new termination provision.

NOW, THEREFORE, in consideration of the mutual covenants and agreements contained herein, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereby agree as follows:

1. Section 5.4 of the PSOS Agreement is hereby amended to read in its entirety as follows:

“Unless this Agreement is terminated pursuant to Section 5.5, 5.6, 5.7, 5.8 or 5.11, either Party may terminate this Agreement with or without cause by giving the other Party no less than three (3) years prior written notice of such termination. The Parties may terminate the Agreement by mutual agreement at any time.”

2. The PSOS Agreement is hereby amended by adding a new Section 5.11, which shall read in its entirety as follows:

“5.11 CIP Compliance. The Parties recognize that certain acquisitions of BES Facilities by MWD or modifications to the existing MWD BES Facilities, which result in an MWD Facility or BES Cyber System being classified as a medium-impact or high-impact facility under the criteria in the CIP-002 Reliability Standard, may have the effect of elevating the impact rating of AEPCO’s control centers from medium-impact facilities to high-impact facilities under such criteria, rendering AEPCO’s control centers subject to compliance with the NERC CIP Reliability Standards’ high-impact requirements by virtue of AEPCO’s designation as MWD’s TOP. In the event that AEPCO reasonably and objectively determines, upon evaluating all relevant data and/or information available to the Parties, that a MWD BES Facility or BES Cyber System meets the definition of a medium-impact or high-impact facility under the criteria in the CIP-002 Reliability Standard, then AEPCO shall promptly notify MWD in writing, setting forth in detail the basis for AEPCO’s determination. Upon such notice, the Parties shall meet and confer in good faith to (1) discuss whether MWD concurs with AEPCO’s determination and (2) determine whether any commercially reasonable actions may be taken by the Parties to

prevent the MWD BES Facility or BES Cyber System from becoming a medium-impact or high-impact facility under the criteria in the CIP-002 Reliability Standard and AEPCO's control centers from becoming subject to compliance with the NERC CIP Reliability Standards' high-impact requirements. Notwithstanding anything to the contrary in this Agreement, if, at any time after the meet-and-confer, AEPCO determines in good faith that AEPCO must terminate this Agreement to prevent AEPCO's control centers from becoming subject to the NERC CIP Reliability Standards' high-impact requirements, then AEPCO shall have the option to terminate this Agreement upon written notice to MWD; provided, however, that AEPCO shall provide MWD with as much advance written notice of termination as possible, but in no event less than one (1) year."

3. This Amendment modifies the PSOS Agreement only as expressly provided herein. All other terms, conditions and provisions of the PSOS Agreement shall remain in full force and effect.

4. The Parties may execute this Amendment in multiple counterparts, each of which constitutes an original, and all of which, collectively, constitute only one Amendment.

5. This Amendment shall be effective and binding on each Party as of the date of the last Party to execute the Amendment.

*[Signature Page Follows]*

**IN WITNESS WHEREOF**, the Parties have caused this Amendment to be executed and delivered by their respective duly authorized officers as of the date set forth.

ARIZONA ELECTRIC POWER COMPANY, INC.

By: \_\_\_\_\_

Name: Patrick F. Ledger

Title: Executive Vice President and Chief Executive Officer

Date: \_\_\_\_\_

METROPOLITAN WATER DISTRICT

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

## FIRST AMENDMENT TO THE SCHEDULING AND TRADING SERVICES AGREEMENT

This First Amendment to the Scheduling and Trading Services Agreement (“**Amendment**”) is entered into this \_\_\_ day of \_\_\_\_\_, 2023, by and between Metropolitan Water District of Southern California (“**MWD**”), a governmental utility operating under the laws of the State of California, and Arizona Electric Power Cooperative, Inc. (“**AEPCO**”), a non-profit cooperative corporation organized under the generation and transmission electric cooperative laws of the State of Arizona. MWD and AEPCO are also hereinafter referred to individually as a “Party” or collectively as the “Parties.”

WHEREAS, the Parties entered into that certain Scheduling and Trading Services Agreement dated August 28, 2017 (“**S&T Agreement**”), whereby AEPCO provides certain scheduling and trading services to MWD; and

WHEREAS, the Parties wish to amend the S&T Agreement to add a new termination provision and to modify the credit services provision.

NOW, THEREFORE, in consideration of the mutual covenants and agreements contained herein, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereby agree as follows:

1. Section 5.2 of the S&T Agreement is hereby amended to read in its entirety as follows:

“Unless this Agreement is terminated pursuant to Section 5.3, 5.4 or 5.7, either Party may terminate this Agreement, with or without cause, by giving the other party no less than three years’ prior written notice of such termination. The Parties may terminate the Agreement by mutual agreement at any time.”

2. The S&T Agreement is hereby amended by adding a new Section 5.7, which shall read in its entirety as follows:

“In the event that AEPCO elects to terminate the PSOS Agreement pursuant to Section 5.11 of that agreement, MWD may terminate this Agreement, with or without cause, by giving AEPCO no less than one (1) year prior written notice of such termination.”

3. Section 7.3 of the S&T Agreement is hereby amended to read in its entirety as follows:

“Section 7.3 Credit Services: In consideration of the Deposit Account provided for in Section 8.3 hereof, AEPCO shall use its creditworthiness and credit thresholds with its power supplying creditworthy counterparties for purposes of making MWD Real-time Purchases, MWD Day Ahead Purchases, and MWD Forward Purchases, and selling excess energy available to MWD to creditworthy on MWD's behalf. MWD shall seek to establish its own credit and credit thresholds with such Creditworthy counterparties sufficient in magnitude to replace AEPCO's use of its creditworthiness and credit thresholds on MWD's behalf for the purposes of MWD Forward Transactions. AEPCO shall assist MWD in its efforts to establish creditworthiness and credit thresholds with creditworthy counterparties.



In the event the monthly invoice to MWD rendered pursuant to Section 9 hereof exceeds and is expected to continue to exceed the amount retained in the Deposit Account pursuant to Section 8.3, AEPCO may provide MWD with evidence of such exceedance, and MWD shall increase the amount in the Deposit Account to an amount mutually agreeable to the Authorized Representatives. In connection with the foregoing, to the extent AEPCO uses its creditworthiness and credit thresholds on behalf of MWD, including any posting of collateral or draw on collateral by a counterparty, MWD shall (i) pay any out-of-pocket costs of AEPCO in using such creditworthiness and credit thresholds and (ii) indemnify, defend and hold harmless AEPCO for any liability, loss, damage, claim, cost or expense AEPCO incurs arising out of or resulting from its use of such creditworthiness and credit thresholds in connection with the transactions contemplated hereby (except to the extent such liabilities, losses, damages, claims, costs and or expenses occur as a result of AEPCO's failure to perform its obligations under this Agreement). MWD acknowledges that AEPCO may use its creditworthiness and credit thresholds on behalf of other members or third parties, and that AEPCO may utilize its credit thresholds on behalf of other members in priority to use of its credit thresholds on behalf of MWD."

4. This Amendment modifies the S&T Agreement only as expressly provided herein. All other terms, conditions and provisions of the S&T Agreement shall remain in full force and effect.

5. The Parties may execute this Amendment in multiple counterparts, each of which constitutes an original, and all of which, collectively, constitute only one Amendment.

6. This Amendment shall be effective and binding on each Party as of the date of the last Party to execute the Amendment.

*[Signature Page Follows]*

**IN WITNESS WHEREOF**, the Parties have caused this Amendment to be executed and delivered by their respective duly authorized officers as of the date set forth.

ARIZONA ELECTRIC POWER COMPANY, INC.

By: \_\_\_\_\_

Name: Patrick F. Ledger

Title: Executive Vice President and Chief Executive Officer

Date: \_\_\_\_\_

METROPOLITAN WATER DISTRICT

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_