

P.O. Box 982 El Paso, Texas 79960-0982

March 3, 2025

Debbie-Anne A. Reese Secretary Federal Energy Regulatory Commission 888 First Street, N.E. Washington, DC 20426

RE: El Paso Electric Company, Docket No. ER25-

Filing of Revised Schedule 10 (Real Power Losses)

# Dear Secretary Reese:

Pursuant to Section 205 of the Federal Power Act ("FPA") and Part 35 of the regulations of the Federal Energy Regulatory Commission ("FERC" or "Commission"), El Paso Electric Company ("EPE") respectfully submits revised Schedule 10 (Real Power Losses) of its Open Access Transmission Tariff ("OATT"). The filed Schedule 10 includes updated transmission loss factors based on EPE's latest available transmission loss study.

### I. EL PASO ELECTRIC COMPANY

EPE is a vertically integrated electric utility whose primary business is serving native load in far west Texas and southern New Mexico. EPE provides service to about 450,000 customers in an area of approximately 10,000 square miles. EPE is authorized to sell energy and owns transmission facilities over which it offers service under its Open Access Transmission Tariff ("OATT").

# II. DESCRIPTION OF THE FILING

EPE agreed, as part of a Settlement Agreement approved by the Commission in Docket No. ER22-282-000, to make a filing to update its real power loss factors within six months of the effective date of that settlement.<sup>1</sup> Section 5.1 of the Settlement Agreement provides that EPE should file revised Schedule 10 of its OATT to reflect updated transmission loss factors based on a transmission loss study.<sup>2</sup>

<sup>1</sup> Letter Order Approving El Paso Electric Settlement Agreement, Docket No. ER22-282-000 (Aug. 2, 2024).

<sup>&</sup>lt;sup>2</sup> In its entirety, Section 5.1 reads: "EPE agrees to file with the Commission, no later than six months following the Settlement Effective Date, revisions to Schedule 10 of the EPE OATT to reflect updated transmission loss factors based on a transmission loss study."

Therefore, EPE is filing this revised Schedule 10, which is based on EPE's latest available loss study performed by Dr. Paul Normand of Management Applications Consulting, Inc. The study incorporates data from EPE's transmission system consisting of voltages 69 kV to 345 kV. Applying Dr. Normand's study results, EPE is proposing to revise its real power loss factor to decrease it from 4.23% to 2.374%, as reflected in the marked version of EPE's OATT Schedule 10. Schedule 10, as revised, seeks to apply the same loss factor to all OATT services performed in the EPE Balancing Authority Area without regard to whether the OATT service is Point-to-Point Transmission Service or Network Integration Transmission Service. The two-part loss factor structure for Network Integration Transmission Service currently in effect under EPE's OATT is being discontinued and replaced with a structure under which a single loss factor is assessed. This update is consistent with Commission-approved methodologies in effect on other transmission provider systems, which use a single loss factor for network service.

## III. EFFECTIVE DATE

EPE requests that the Commission accept EPE's filing effective 60 days from the day of this filing (May 2, 2025).<sup>5</sup>

### IV. COMMUNICATIONS

Communications regarding this filing should be sent to the following individuals:

Cynthia Henry	Milena Yordanova*
Vice President – General Counsel	Senior Attorney
El Paso Electric Company	El Paso Electric Company
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### V. CONTENTS OF THIS FILING

- 1. Transmittal letter;
- 2. Results of Dr. Paul Normand's loss factor calculations and explanatory notes; and
- 3. Schedule 10 tariff record in clean and marked format.

### VI. CONCLUSION

EPE respectfully requests that the Commission accept the attached Schedule 10 tariff record,

<sup>3</sup> EPE is a joint co-owner of certain 500 kV transmission facilities located in Arizona. Such facilities are not part of EPE's Balancing Authority Area. Transmission losses for those Arizona facilities are assessed by the operator of those facilities, as set forth in EPE's OATT. The instant filing does not seek to change how losses are assessed for those Arizona facilities (See EPE's Schedule 10 regarding external paths).

<sup>&</sup>lt;sup>4</sup>E.g., see Public Service Company of New Mexico (Schedule 10, referencing Section 28.5 of its OATT), Arizona Public Service Company (Schedule 12, referencing 28.5 of its OATT).

<sup>&</sup>lt;sup>5</sup> 16 U.S.C. § 824d(d).

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as proposed.

Respectfully submitted,

# /s/Milena Yordanova

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### **SCHEDULE 10**

### **Real Power Losses**

The Transmission Customer taking Network Integration Transmission Service,
Firm Point-to-Point, or Non-Firm Point-to-Point Transmission Service, excluding Energy
Imbalance Service and Generator Imbalance Service, shall reimburse the Transmission
Provider for Real Power Losses as provided in this Tariff. The Transmission Customer
must financially settle for Real Power Losses by reimbursement as specified herein.
The procedures to determine the amount of Real Power Losses associated with a
Transmission Customer's Base Schedule, as well as the reimbursement for Real Power
Losses, are set forth below:

The amount of Real Power Losses assessed to a Transmission Customer in a given hour shall be the product of such Transmission Customer Base Schedule during the hour in MWhs and the applicable loss factor provided in this Schedule 10. The Transmission Customer shall compensate the Transmission Provider at a rate equal to the amount of Real Power Losses assessed to such Transmission Customer in a given hour multiplied by the hourly LAP price for the EPE BAA in that hour as established by the MO under section 29.11 (b)(3)(C) of the MO Tariff, except that with respect to transmission services provided on paths external to the EPE BAA, the Transmission Customer shall compensate the Transmission Provider at a rate equal to the rate assessed by the operator pursuant to the ANPP Valley Transmission System Agreement. Transmission Provider shall post the compensation methodology for losses on the ANPP Valley Transmission

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System on its OASIS system.

## **Real Power Loss Factors:**

- 1) Point-to-Point Transmission Service on External Transmission Paths: For the following transmission paths, the Real Power Loss factors will be the same as the hourly loss factors Transmission Provider is charged by the applicable transmission owner or operator pursuant to the ANPP Valley Transmission System Agreement. The Points of Receipt and Points of Delivery served by the Transmission Provider on the ANPP Valley Transmission System are as follows: PALOVERDE500, WESTWING500, KYRENE500, and JOJOBA500.
- Point-to-Point Transmission Service on Internal Transmission Paths: For both non-recallable (firm) and recallable (non-firm) Point to Point Transmission Service on transmission paths internal to the Transmission Provider's BAA, the Real Power Loss factor will be based on the Transmission Provider's average system losses of 2.374 percent.
- 3) **Network Integration Transmission Service:** For Network Integration Transmission Service, the Real Power Loss factors will be 2.374 percent.

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- Point-to-Point Transmission Service on Internal Transmission Paths: For both non-recallable (firm) and recallable (non-firm) Point to Point Transmission Service on transmission paths internal to the Transmission Provider's BAA, the Real Power Loss factor will be based on the Transmission Provider's average system losses of 2.374 4.23 percent.
- Network Integration Transmission Service: For Network Integration

  Transmission Service, the Real Power Loss factors will shall be 2.3744.23 percent for Demand and 2.69 percent for Energy.



# MANAGEMENT APPLICATIONS CONSULTING, INC.

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## A. REVISED LOSS FACTOR

## TABLE I

Transmission Voltage 345 kV-115 kV-69 kV

Loss Factor % 2.374%

Loss factors are simply the ratio of the energy loss to the total energy. The total energy can be referenced to either the input level, which also includes losses, or the losses by the total delivered energy excluding losses. The latter calculation is the proposed annual energy loss factor. The average loss factors are identified based on a review of data in El Paso Electric Company's Balancing Authority Area.

## TABLE II

Illustrative Example:

Input MWH	1,050
Delivered MWH	1,000
Losses	50

1) Loss Factor 
$$\frac{50}{1,000} = 0.0500$$

2) Loss Factor (Input) 
$$\frac{50}{1,000 + 50} = 0.04762$$

# **B.** LOSS FACTOR CALCULATION

Losses occur in all electrical equipment in the transmission of energy in El Paso Electric Company's transmission facilities consisting of conductor circuits and substation transformers.

The loss calculations consisted of initially modeling the hourly transmission load seasonally (Summer – June, July, August, September and Winter – all other months). With these hourly loads, power flows analyses were prepared for each season consisting of five hourly analyses (100, 90, 75, 50, and 40%) of the peak in each season, or a total of ten power flows. Using this detail loss information, a linear interpolation of the hourly losses was estimated between the load and loss levels between the identified percent load levels. As a result, hourly loss calculations are derived with the technical support being provided by the ten detailed power flows for the calendar year.

The proposed Transmission Loss Factor is an annual energy delivery (output) consisting of the following results.

## TABLE III

Transmission Losses Transmission Hourly Load Loss Factor at Input	200,347 MWH 8,641,306 MWH = 0.02318	(Input)
Loss Factor at Meter	200,347 MWH 8,440,959 MWH = 0.02374	(Output)

# Explanatory Notes on the Loss Factor Analysis

Transmission line losses were calculated for EPE based on a modeling of unique voltage levels identified by power flow data and configuration for the entire EPE Balancing Authority Area, which consists of 69 kV to 345 kV voltage levels. Specific information as to length of line, voltage level, peak load, maximum load, etc., were reviewed. The loss calculations consisted of determining multiple line loading levels separately and evaluating the results for each recognized segment which was then summed by voltage levels.

After several system coincident peak hour losses were identified by season for each major transmission voltage level, a separate calculation was then made to develop annual average energy losses based on an hourly loss calculation. Using the results of ten power flows, hourly losses were derived for hours of the calendar year. The data upon which the evaluation losses was performed is data for the calendar year 2021.

The evaluation of transformer losses considered the characteristics associated with each transformer type, such as auto transformers and line transformers. Generator step-up transformers were excluded in the calculation of the updated loss factor presented in this filing.

# FERC rendition of the electronically filed tariff records in Docket No. ER25-01463-000

# Filing Data:

CID	Filing Title	Company Filing Identifier	Type of Filing Code	Associated Filing Identifier
	OATT Revisions to Schedule 10	212	10	
C000465	Tariff Title	Tariff ID	Payment Confirmation	Suspension Motion
	Open Access Transmission Tariff	5		

# **Tariff Record Data:**

Record Content Description	Schedule 10
Tariff Record Title	Real Power Losses
Record Version Number	0.4.0
Option Code	A
Record Narrative Name	
Tariff Record ID	50
Tariff Record Collation Value	527945008
Tariff Record Parent Identifier	0
Proposed Date	2025-05-02
Priority Order	550
Record Change Type	CHANGE
Record Content Type	1
Associated Filing Identifier	

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Document Content(s)
EPE Transmittal_OATT Sch 10_3 3 2025.pdf1
SCHEDULE 10 REAL POWER LOSSES_Clean.pdf4
SCHEDULE 10 REAL POWER LOSSES_Marked.pdf6
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Explanatory Narrative of Dr. Normand_EPE Loss Factor.pdf10
FERC GENERATED TARIFF FILING.PDF11