



BROWNSVILLE
PUBLIC UTILITIES BOARD

PUBCAP Meeting

• • • Wednesday, January 21, 2026



BROWNSVILLE
PUBLIC UTILITIES BOARD

Call Open Meeting To Order



BROWNSVILLE
PUBLIC UTILITIES BOARD

Approval of November Minutes



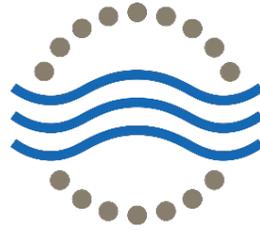
BROWNSVILLE
PUBLIC UTILITIES BOARD

Old Business



BROWNSVILLE
PUBLIC UTILITIES BOARD

New Business



BROWNSVILLE
PUBLIC UTILITIES BOARD

Fuel & Purchased Energy Supply

● ● ● P U B C A P M E E T I N G | January 21, 2026

Cassandra Rosales

Fuel & Purchased Energy Manager

Agenda

The BPUB meets its power supply obligations through a combination of resources:

- The Electric System
- Hidalgo Power Plant
- Silas Ray Power Plant
- Fuel Management
- Power Purchase Agreement – Constellation/Sendero
- Power Purchase Agreement –AEP Energy Partners
- Wholesale Market Purchases
- Fuel & Purchased Energy Charge

The Electric System

The electric system provides retail electric service to consumers inside and outside the city limits.

- Encompasses approximately 133sq miles of Cameron County
- Approximately 55,000 electric customers
- Fiscal Year 2025 peak demand – 283 MW
- Fiscal Year 2025 sales to customers – 1,346,482 MWh
- All time peak demand in FY 2024 - 317 MW

Calpine Hidalgo Power Plant

BPUB has an ownership interest of 21.472% of the combined cycle plant entitling it to gas fired capacity of 105 MW.

The plant is composed of a 2x1 combined cycle including two combustion turbines and a steam turbine.



Silas Ray Power Plant

Silas Ray Power Plant is owned and operated by BPUB.

The facility consists of three units with a total capacity of 116 MW including a 50 MW aeroderivative gas turbine (Unit 10), a 45 MW natural gas combustion turbine (Unit 9), and a 21 MW steam turbine (Unit 6) operating in combined cycle with Unit 9.



Fuel Management

The fuel and transportation agreements help limit BPUB's exposure to the volatile fuel commodity markets.

- The BPUB has a gas transportation agreement with Texas Gas Service and a gas supply agreement with Tenaska Marketing Ventures for service to its Silas Ray Power Plant.
 - BPUB has a gas supply agreement with Calpine for services to its Hidalgo Power Plant.
- 

Constellation/Sendero Power Purchase Agreement

The Power Purchase Agreement with Constellation entitles the Board to 78 MW of renewable energy.

The Sendero Wind Farm is located in Jim Hogg county and consists of 39 wind turbines.



AEP Energy Partners Power Purchase Agreement

The Power Purchase Agreement with AEP Energy Partners is a hybrid of fixed energy and wind energy. Through this PPA the Board receives and estimated 65 MWs of energy.

Dessert Sky Wind Farm located in Pecos County and consists of 107 wind turbines. BPUB is entitled to 62.2% of the wind farm.



Wholesale Market Purchases

BPUB's participates in the ERCOT wholesale market as both a Load Serving Entity and through its Qualified Scheduled Entity (QSE).

As an LSE, BPUB has an obligation to serve its native load.

The QSE optimizes BPUB's energy portfolio to fulfill this load obligation in the most economical way and will make purchases from the market when conditions are favorable.



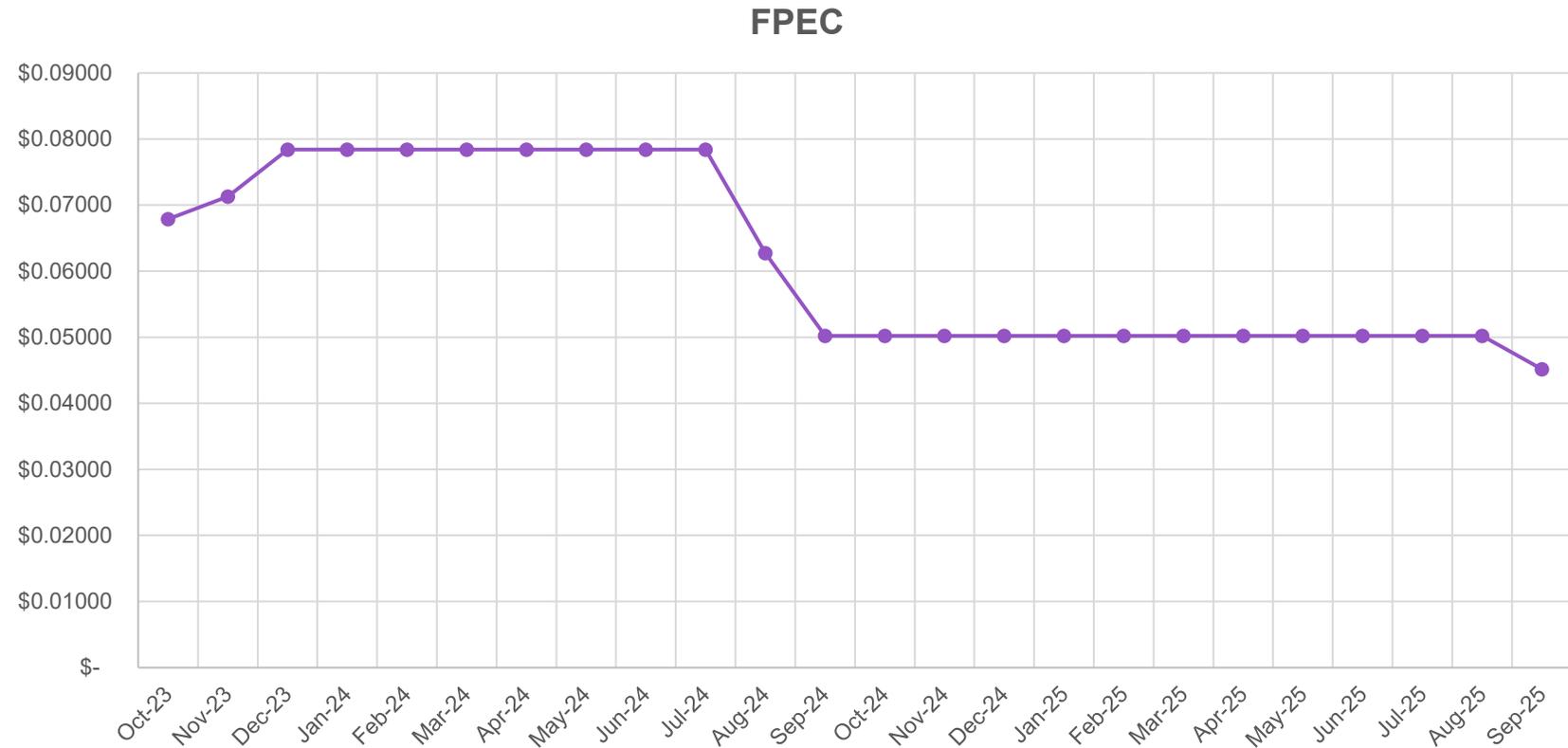
Fuel & Purchased Energy Dept.

One of the department's responsibilities is the energy accounting of BPUB's energy portfolio. Power production costs are analyzed to assist in calculating and recommending the fuel and purchased energy charge (FPEC).

The fuel and purchased energy charge is a pass through fee that reflects the production costs and any other costs associated with meeting BPUB's energy requirements which is then multiplied by the customer's KWh consumption.

FPEC

Oct-23	\$0.06789
Nov-23	\$0.07128
Dec-23	\$0.07841
Jan-24	\$0.07841
Feb-24	\$0.07841
Mar-24	\$0.07841
Apr-24	\$0.07841
May-24	\$0.07841
Jun-24	\$0.07841
Jul-24	\$0.07841
Aug-24	\$0.06273
Sep-24	\$0.05019
Oct-24	\$0.05019
Nov-24	\$0.05019
Dec-24	\$0.05019
Jan-25	\$0.05019
Feb-25	\$0.05019
Mar-25	\$0.05019
Apr-25	\$0.05019
May-25	\$0.05019
Jun-25	\$0.05019
Jul-25	\$0.05019
Aug-25	\$0.05019
Sep-25	\$0.04517



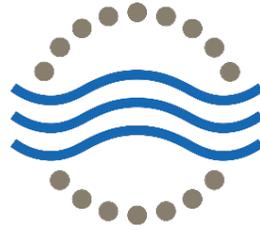
Average Customer Bill

Oct-23	\$	128.96
Nov-23	\$	132.35
Dec-23	\$	139.48
Jan-24	\$	139.48
Feb-24	\$	139.48
Mar-24	\$	139.48
Apr-24	\$	139.48
May-24	\$	139.48
Jun-24	\$	139.48
Jul-24	\$	139.48
Aug-24	\$	123.80
Sep-24	\$	111.26
Oct-24	\$	111.26
Nov-24	\$	111.26
Dec-24	\$	111.26
Jan-25	\$	111.26
Feb-25	\$	111.26
Mar-25	\$	111.26
Apr-25	\$	111.26
May-25	\$	111.26
Jun-25	\$	111.26
Jul-25	\$	111.26
Aug-25	\$	111.26
Sep-25	\$	106.24



Conclusion

We strive to have a diversified energy portfolio and maintain cost efficient energy to ensure that the pass through costs to customers are as low as possible.



BROWNSVILLE
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Welcome to Protection & Controls

● ● ● P U B C A P M E E T I N G |

1/21/2026

Eleazar Ruiz Jr., P.E.

Protections & Control Engineer

Substations & Relaying

Presentation (Agenda)

- Why Protection
- The Grid
- Breakers
- Relays
- Questions

Why Protection?

- People
- Equipment
- Environment
- Service

The Electric Grid

- Transmission
 - Substations
 - Transformers
 - Distribution
- 

Transmission Lines



Substation Bus



Transformer



Distribution Switch Gear



Breakers & Relays

Breakers allow the ability to open an electric circuit

Relays provide the management & control of large amounts of electric energy

A Couple of Definitions

Breaker: A device that like a switch, opens the circuit when overloaded or actuated.

Relay: An electrical device such that current flowing through it in one circuit can switch on and off a current in a second circuit. In laymen's terms; a device that allows us to use a small amount of electricity to control a larger amount of electricity

Relays Control Breakers



How does the relay do its job?

CT's Current transformers

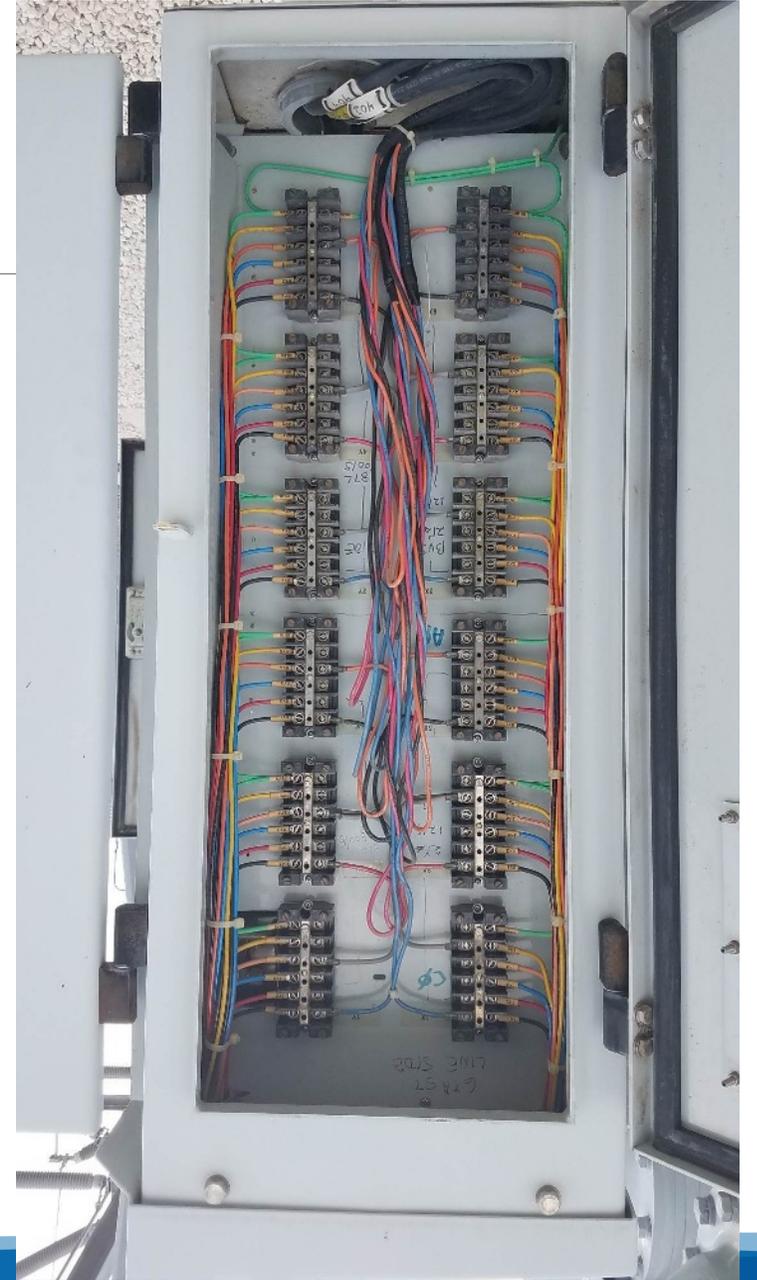
PT's Potential (voltage)transformers

Hardwire inputs from the field (status, alarms)

Programming & settings



CT's & PT's

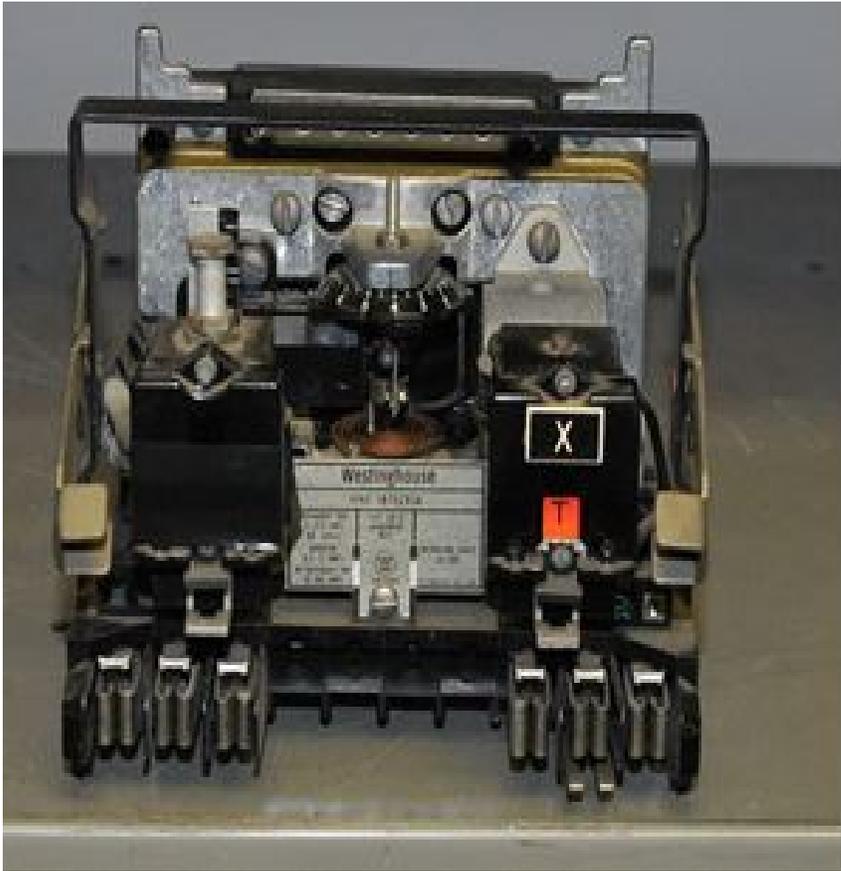


How Relays Work

Relays use various inputs to manage various outputs.

Inputs or Outputs can be Analog volts or amps, digital signals, radio waves, & fiber optic signals.

Modern Relays are excellent management tools than can be used for more than just protecting the grid.



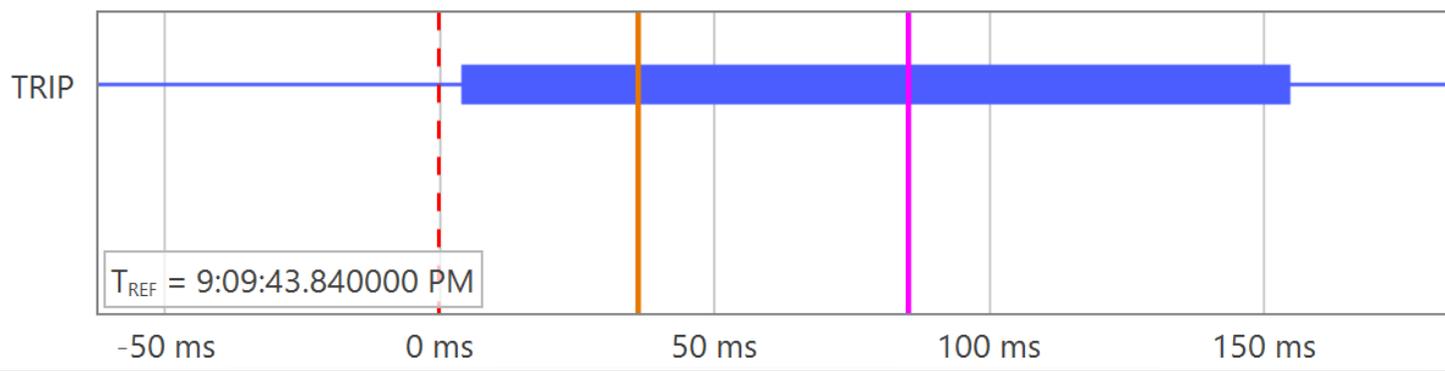
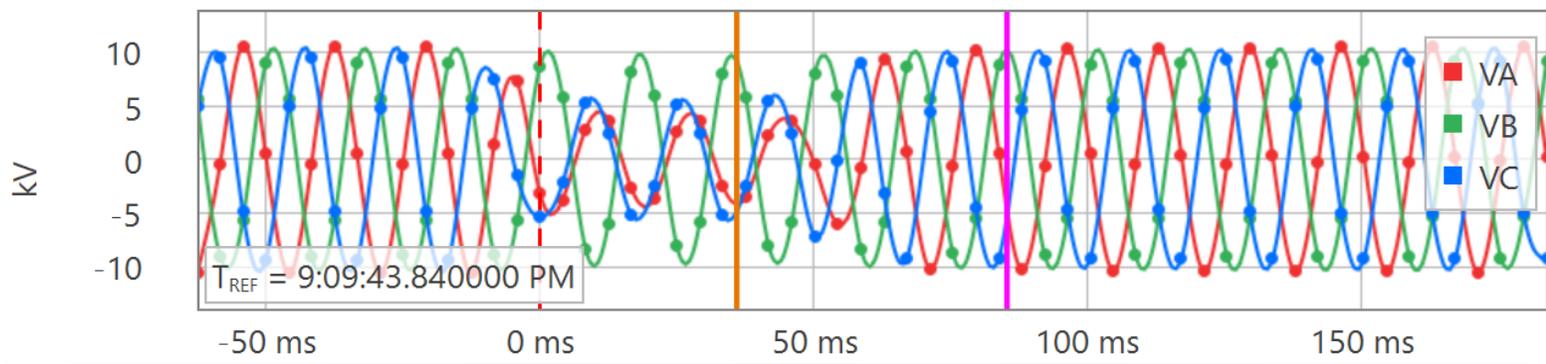
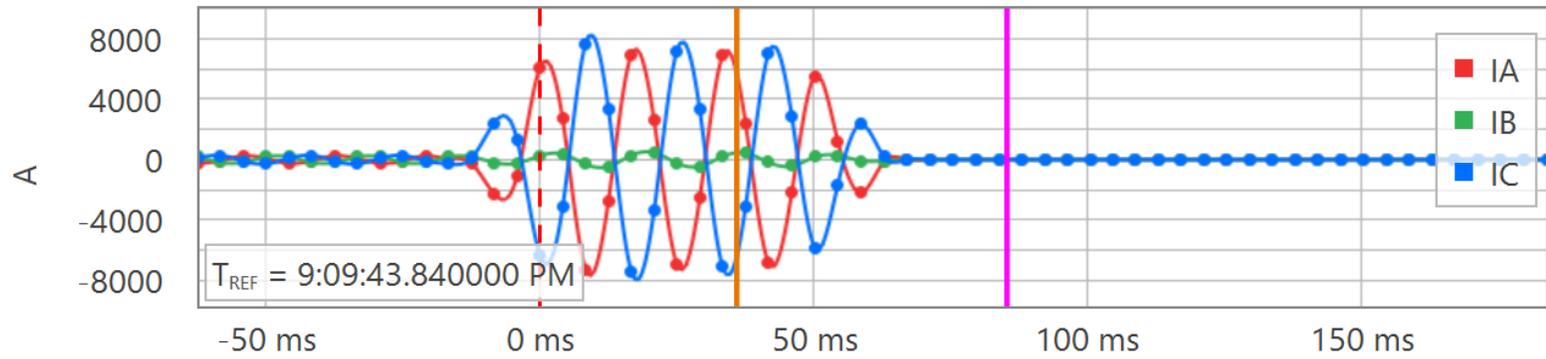
← Legacy Relay

Modern Relay →



The Present & Future





» Events

Open

1

SEL-351S-7-R113-V0-Z005005-D20030908

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FID: SEL-351S-7-R113-V0-Z005005-D20030908

Event Type: CA T

Calculations

+ New Calculation



**Protection failure can
lead to disastrous
consequences**



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Questions?

ELEAZAR RUIZ, JR, SUBSTATIONS & RELAYING

A decorative graphic at the bottom of the slide consists of several overlapping, curved bands in various shades of blue, creating a sense of movement and depth.



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Public Comments



BROWNSVILLE
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Next Meeting Date

FEBRUARY 18, 2026



BROWNSVILLE
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Adjournment
