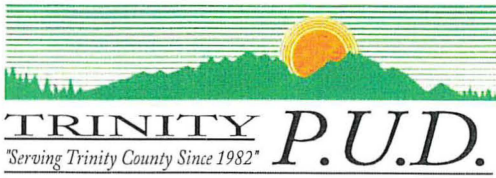


DOCKETED

Docket Number:	22-BSTD-04
Project Title:	2022 Energy Code Photovoltaic and Battery Storage Cost Effectiveness Determinations
TN #:	247659
Document Title:	TPUD 2022 Non Residential+High Rise Multifamily Solar PV Determination Application
Description:	N/A
Filer:	Muhammad Faisal Saeed
Organization:	California Energy Commission
Submitter Role:	Commission Staff
Submission Date:	11/22/2022 1:31:40 PM
Docketed Date:	11/22/2022



November 21, 2022

Mr. Muhammad Faisal Saeed, P.E., CEM, LEED AP (BD+C)
Senior Electrical Engineer
Building Standard Office, Efficiency Division
California Energy Commission
715 P Street
Sacramento, CA 95814
Muhammad.Saeed@Energy.ca.gov

RE: Trinity Public Utilities District's Request for Non-Residential and High-Rise
Residential Solar Photovoltaic and Battery Storage Determination

Dear Mr. Saeed,

On behalf of the Trinity Public Utilities District (TPUD), I am writing to seek a determination from the California Energy Commission (Commission) under Section 10-109(k) of the 2022 Energy Code. Section 10-109(k) allows the Commission to determine that the solar photovoltaic (PV) and/or battery storage system requirements of Section 140.10, applicable to nonresidential buildings, and Section 170.2, applicable to multi-family homes with more than three habitable stories, should not apply if the Commission finds that its cost-effectiveness conclusions regarding solar PV and battery storage are not accurate. By this letter, TPUD seeks a determination that the solar PV and/or battery storage requirements of Section 140.10 and 170.2 are not cost effective and should not apply within TPUD's service area.

TPUD supports the Commission's efforts to shift California away from fossil fuel-based energy and TPUD currently distributes and sells 100% carbon-free hydropower that is fully compliant with California's Renewables Portfolio Standards. However, requiring solar PV and/or battery storage in TPUD's service area is not cost-effective and will exacerbate socio-economic challenges faced by Trinity County residents. Trinity County is one of the poorest counties in the state of California, and its remote location makes building in Trinity County more expensive than elsewhere, aggravating our severe housing shortage and making new business development more difficult.

TPUD's low electricity rates make rooftop solar and/or battery storage uneconomic in TPUD's service area for nonresidential buildings and for multi-family homes over three habitable stories. The Commission reached a similar conclusion regarding low-rise residential buildings¹ in 2019

¹ *Staff Review and Analysis for Trinity Public Utility District's Application for a Solar Photovoltaic Determination* at 15 (December 19, 2019), Docket 19-BTSD-05 (TN 231332).

and is currently considering a similar request for a determination under the 2022 Energy Code.² The same analysis should be made for nonresidential buildings and multi-family homes over three habitable stories in TPUD's service area. On behalf of TPUD, I respectfully request that the Commission make the determination under Section 10-109(k) of the 2022 Energy Code that the solar PV requirements of Sections 140.10 and 170.2 do not apply within TPUD's service area.

Sincerely,



Paul Hauser
General Manager

Attachments: Trinity Public Utilities District's Public Hearing Minutes
(November 10, 2022)
Trinity Public Utilities District's Rate Schedule

CC (email only): Cheng Moua, Building Standards Office, CEC
Peter Strait, Building Standards Office, CEC
Bill Pennington, Energy Efficiency Division, CEC
Matt Chalmers, Office of the Chief Counsel, CEC
Drew Bohan, Executive Director, CEC

² See 2022 Energy Code Photovoltaic and Battery Storage Exceptional Methods Determinations (22-BSTD-04).

Trinity Public Utilities District
MINUTES OF THE SPECIAL MEETING OF THE BOARD
November 10, 2022

Location: Trinity Public Utilities District Community Room
26 Ponderosa Lane, Weaverville, California
Board Present: Amanda Barragar, Alex Cousins Nicholas Goulette, Andrew Johnson,
Board Absent: Michael Rourke
Others Present: Paul Hauser, Julie Catanese, Sarah Sheetz, David DeLange

1. Vice-President Cousins called the meeting to order at 1:32 p.m.

2. Approval of the Agenda Order

Director Johnson made a motion to approve the Agenda Order. Director Goulette seconded the motion. The motion passed with the following voice vote:

Ayes: Amanda Barragar, Alex Cousins, Nick Goulette, Andy Johnson,
Noes: None
Absent: Mike Rourke
Abstain: None

3. Conduct a Public Hearing and upon conclusion, consider approval of a request to the California Energy Commission seeking a determination that the photovoltaic and battery storage requirements for non-residential and high-rise, multi-family buildings of Section 140.10 and 170.2 of the 2022 Energy Code shall not apply on the basis of cost effectiveness.

Mr. Hauser reviewed the report with the Board, providing background information on the existing residential exemption which provides relief from the rooftop solar mandate in the building code on new residential construction throughout the District's Service Territory. A preliminary analysis was conducted by California Energy Commission Staff on the basis of cost effectiveness. The District has submitted an application to continue the existing residential exemption, and is now also seeking a determination that would apply to new construction for both the rooftop solar and battery storage requirements for non-residential and multi-family buildings.

The Public Hearing was opened at 1:39 p.m. There being no comments from the public, the Public Hearing was closed at 1:41 p.m.

Director Goulette made a motion to approve the submission of the District's Request for a Determination that the Solar Photovoltaic and Battery Storage Requirements of Section 140.10 and 170.2 of the 2022 Energy Code not apply for Non-Residential and High-Rise, Multi-Family Buildings on the basis of cost effectiveness. Director Barragar seconded the motion. The motion passed with the following voice vote:

Ayes: Amanda Barragar, Alex Cousins, Nick Goulette, Andy Johnson,
Noes: None
Absent: Mike Rourke
Abstain: None

4. Adjournment

There being no further business, Vice-President Cousins adjourned the meeting at 1:42 p.m.

Michael Rourke, President

ATTEST: _____
Andrew Johnson, Clerk

**PRIMARY
GENERAL SERVICE/COMMERCIAL SERVICE A**

APPLICABILITY

This schedule applies to single-phase and polyphase alternating current service for electric loads that do not exceed 1000 KVA, and to any other electric service that is not applicable to another rate schedule.

January of each year all meters in Rate Schedule 3 will be reviewed to determine the System Access Charge for the current year. All new commercial accounts will receive the higher System Access Charge until the following year's review.

This service is not available for resale, standby or auxiliary service, or service to any equipment, which will cause excessive voltage fluctuation.

The owner of a service that has been reclassified from Rate Schedule 3, Commercial Service, to Rate Schedule 20, High Impact Service, due to usage higher than 9,999 kWh in any given month may petition the District's General Manager for reclassification back to Rate Schedule 3 after twelve (12) consecutive months with usage below 10,000kWh.

MONTHLY RATE

EFFECTIVE DATE	GEOGRAPHIC ZONE A		GEOGRAPHIC ZONE B	
	SYSTEM ACCESS CHARGE*	ENERGY CHARGE – kWh	SYSTEM ACCESS CHARGE*	ENERGY CHARGE - kWh
2/11/2022	\$41.25	\$0.07508	\$41.25	\$0.09011
2/11/2023	\$46.50	\$0.07758	\$46.50	\$0.08761
2/11/2024	\$51.75	\$0.08008	\$51.75	\$0.08511
2/11/2025	\$57.00	\$0.08259	\$57.00	\$0.08259

*A discount of 25% will be applied to the System Access Charge for single-phase accounts utilizing less than 1,000 kWh per month.

POWER FACTOR

If an electric load routinely falls below a power factor of 75% then the customer shall pay, in addition to the charges above, a power factor charge equal to the sum of the following:

1. \$10 per month, plus
2. the Energy charge above times a percent corresponding to the average power factor (computed from the average kW and the average kvar) as follows:

Power Factor	Percent Increase	Power Factor	Percent Increase	Power Factor	Percent Increase	Power Factor	Percent Increase
75%	5.3%	57%	12.1%	39%	25.0%	21%	60.2%
74%	5.6%	56%	12.6%	38%	26.1%	20%	64.0%
73%	5.9%	55%	13.1%	37%	27.2%	19%	68.2%
72%	6.2%	54%	13.6%	36%	28.4%	18%	72.9%
71%	6.5%	53%	14.2%	35%	29.7%	17%	78.1%
70%	6.9%	52%	14.8%	34%	31.1%	16%	84.0%
69%	7.2%	51%	15.4%	33%	32.5%	15%	90.7%
68%	7.5%	50%	16.0%	32%	34.0%	14%	98.3%
67%	7.9%	49%	16.7%	31%	35.6%	13%	107.1%
66%	8.2%	48%	17.3%	30%	37.3%	12%	117.3%

65%	8.6%	47%	18.0%	29%	39.2%	11%	129.5%
64%	9.0%	46%	18.8%	28%	41.1%	10%	144.0%
63%	9.4%	45%	19.6%	27%	43.3%	9%	161.8%
62%	9.8%	44%	20.4%	26%	45.5%	8%	184.0%
61%	10.2%	43%	21.2%	25%	48.0%	7%	212.6%
60%	10.7%	42%	22.1%	24%	50.7%	6%	250.7%
59%	11.1%	41%	23.0%	23%	53.6%	5%	304.0%
58%	11.6%	40%	24.0%	22%	56.7%		

Services subject to a Power Factor charge shall be required to pay the District's costs to install and maintain the metering or to otherwise collect sufficient data on the amount of reactive power consumed to determine the amount of reactive power consumed.

If the reactive power consumed as a result of, and during the operation of, a generator delivering real power to the District's system then the reactive power will be free of charges from the District. In the event of such generator operation for a partial month, the District shall use historical averages to estimate the amount of reactive power consumed when the generator was not delivering real power to the District's system.

GEOGRAPHIC ZONES

Customers within the geographic boundaries of the District that existed on June 30, 1993, and in the geographic boundaries of the Hayfork Valley P.U.D. that existed on June 30, 1993 are classified customers within the Geographic Zone A, all other customers are classified as within Geographic Zone B. The geographic boundaries shall be determined by records kept by the County Clerk.

DROUGHT RELIEF SURCHARGE

To the charges computed under the above rate, including any adjustments, shall be added applicable Drought Relief surcharges pursuant to Rate Schedule No. 18, Drought Relief Surcharge.

TAX CLAUSE

To the charges computed under the above rate, including any adjustments, shall be added the applicable proportionate part of any taxes or governmental impositions which are, or may in the future be, assessed on the basis of gross revenues of the District and/or the price or revenue from the electric energy or service sold and/or the volume of energy generated or purchased for sale and/or sold hereunder. As of the date this rate was approved, two such assessments existed: (1) the specified per kWh tax established by the California Energy Commission, and (2) a 2.85% of revenue "Public Benefit" surcharge on total revenue from power sold.

GUARANTEED PAYMENTS

When a customer agrees pursuant to the District Line Extension Policy, to guarantee certain payments, such payments may supersede the rates established herein.

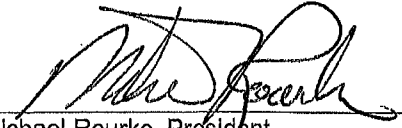
TERMS AND CONDITIONS

1. The District shall not be liable for any damages, direct, consequential, or any other, if this rate is terminated or the provisions thereof changed by action of the Board of the District or any regulatory agency, state or federal, or by action of any court.
2. The rates stated herein are subject to such changes as may be authorized by the Board of Directors of the District from time to time.

AVAILABILITY

Throughout the entire District service area where the facilities of the District are available of adequate capacity, and reasonably accessible to the customer service panel.

Date Effective: February 11, 2022
Date Approved: January 13, 2022
Resolution No.: 22-02


Michael Rourke, President

PRIMARY RESIDENTIAL SERVICE A

APPLICABILITY

This schedule is applicable to single-phase and polyphase residential service in single-family dwellings and in flats and apartments separately metered by the District; to single-phase and polyphase service in common areas in a multifamily complex; to a second single-phase service to a single-family residential premise for service to domestic water pumping and unattached outbuildings and barns; to residential single-phase and polyphase service supplied to a mobile home park or residential RV Park through one meter on a single premise and submetered to all individual tenants. Residential service shall not be applicable to or available for new three-phase service after December 1, 1995, resale for profit, standby or auxiliary service, service to any single motor exceeding a nameplate rating of ten (10) horsepower, or any equipment which will cause excessive voltage fluctuations.

Any Residential service that uses more than 9,999 kWh in any given month will be reclassified to Rate Schedule 20, High Impact Load Service. For the purpose of determining monthly usage all electric meters on a parcel shall have their energy usage aggregated and treated as a single meter. However, the System Access Charge shall apply to all meters separately. Once reclassified, and after twelve (12) consecutive months with usage below 10,000 kWh, the owner may petition the District's General Manager for reclassification back to Rate Schedule 1. Residential services that service a common area in a multifamily complex, or a service supplying power to a mobile home park or residential RV Park through one meter will be exempt from reclassification to Rate Schedule 3 or Rate Schedule 20.

MONTHLY RATE

EFFECTIVE DATE	GEOGRAPHIC ZONE A		GEOGRAPHIC ZONE B	
	SYSTEM ACCESS CHARGE	ENERGY CHARGE - kWh	SYSTEM ACCESS CHARGE	ENERGY CHARGE - kWh
2/11/2022	27.50	0.05764	27.50	0.07472
2/11/2023	31.00	0.05983	31.00	0.07122
2/11/2024	34.50	0.06202	34.50	0.06772
2/11/2025	38.00	0.06422	38.00	0.06422

GEOGRAPHIC ZONES

Customers within the geographic boundaries of the District that existed on June 30, 1993, and in the geographic boundaries of the Hayfork Valley P.U.D. that existed on June 30, 1993 are classified customers within the Geographic Zone A, all other customers are classified as within the Geographic Zone B. The geographic boundaries shall be determined by records kept by the County Clerk.

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To the charges computed under the above rate, including any adjustments, shall be added applicable Drought Relief surcharges pursuant to Rate Schedule No. 18, Drought Relief Surcharge.

TAX CLAUSE

To the charges computed under the above rate, including any adjustments, shall be added the applicable proportionate part of any taxes or governmental impositions which are, or may in the future be, assessed on the basis of gross revenues of the District and/or the price or revenue from the electric energy or service sold and/or the volume of energy generated or purchased for sale and/or sold hereunder. As of the date this rate was approved, two such assessments existed: (1) the specified per kWh tax established by the California Energy Commission; and, (2) a 2.85% of revenue "Public Benefit" surcharge on total revenue from power sold.

GUARANTEED PAYMENTS

When a customer agrees pursuant to the District Line Extension Policy, to guarantee certain payments, such payments may supersede the rates established herein.

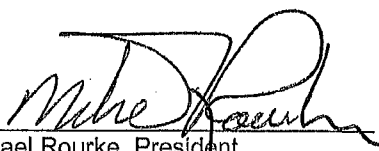
TERMS AND CONDITIONS

1. The District shall not be liable for any damages, direct, consequential, or any other, if this rate is terminated or the provisions thereof changed by action of the Board of the District or any regulatory agency, state or federal, or by action of any court.
2. The rates stated herein are subject to such changes as may be authorized by the Board of Directors of the District from time to time.

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Throughout the entire District's service area where the facilities of the District are available of adequate capacity and reasonably accessible to the customer service panel.

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