

Distributed Generation Interconnection Process

Interested in solar or wind power? TVEC is ready to help!

Whether you are installing a system yourself or using the service of a solar or wind company, please contact us before you get started. By following the guidelines in this document we can help ensure that your system meets safety and technical requirements before connecting to the TVEC system so that you can be up and running as soon as possible.

01 Interconnection Application:

The TVEC Distributed Generation Procedures and Guidelines Manual for any system below 50kW may be requested by contacting TVEC Member Services or downloaded from tvec.net. Contact TVEC for information regarding systems over 50kW.

- The primary TVEC account holder's name must be listed on the application.
- Pages 15-18 and 27-31 must be completed and submitted to TVEC.

02 Interconnection application submission:

- The Interconnection Application must be submitted to TVEC (email energymangement@tvec.coop) along with a wiring diagram of the proposed system to be installed.
- Allow 5-7 business days for the review process
- TVEC personnel will contact you with any corrections that need to be addressed concerning the wiring diagram or Interconnection Application.

03 Completion of the install:

- It is the duty of the installer to notify TVEC that the installation has been completed and is ready for inspection. Email energymangement@tvec.coop or contact TVEC Member Services at (800) 766-9576.
- Allow 5-7 business days for system inspection to be completed. The installer and member will be notified of any items that do not pass inspection.
- Additional fees may be assessed to the installer for additional inspections until all requirements are met.

04 Inspection & Permission to Operate (PTO):

- During the inspection, TVEC will be assessing the size of system, proper disconnects, labeling and means of interconnection.
- When the system meets TVEC requirements & coincides with the information submitted in the Interconnection Agreement and wiring diagram, the system will be approved.
- TVEC will install a billing meter that registers DG excess production, and a separate meter for total production of the DG system.
- Approved installs will then be sent a formal PTO & the member's billing information will be updated to reflect the DG installation.

Residential Distributed Generation Installation Requirements

NOTE: Generation system documentation including a line drawing/diagram and a completed TVEC Interconnection Agreement must be submitted before installation.

1. TVEC requires a meter socket to be installed on the output of the solar/wind distributed generation system. The system will not be approved if this meter socket is not in place and wired correctly. TVEC will provide and install this total output meter at no cost upon system approval.
 2. A Visible Lockable Labeled Disconnect (VLLD) switch must be installed within 10 feet of the utility meter with no barrier between them, or a placard no smaller than 5"x5" must be placed on the meter base with a map and description to locate the VLLD switch.
 3. Appropriate signage and warning labels must be in place signifying that there is on-site generation.
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Residential Distributed Generation Frequently Asked Questions

Does TVEC offer any rebates or incentives?

- TVEC does not offer any direct rebates or incentives for DG installations. Consult with your installer regarding tax incentives or other rebate programs.

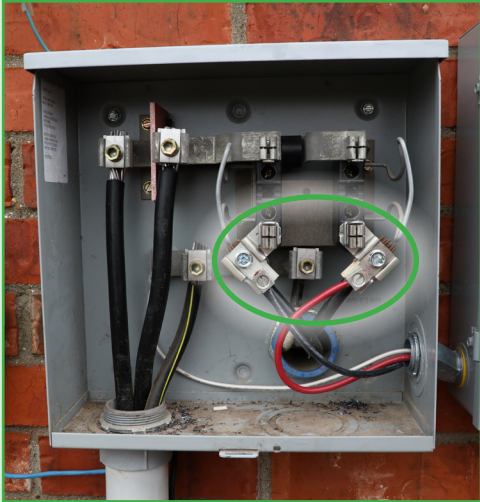
How much does TVEC pay for my excess Solar/Wind production?

- Excess energy (kWh, not consumed by the member) generated by the member's qualifying facility during the billing period and delivered back to the Cooperative is credited to the member at the Co-op's avoided cost, defined as the prior year average wholesale energy and fuel component. This is currently \$0.054403 per kWh as of February 1, 2022.
- If credits for excess energy are greater than the member's monthly bill, the credit will be carried forward to the following billing period. If a credit balance remains in an excess of \$250 at the end of the calendar year, a refund of the entire credit balance will be provided to the member.

Are there any fees for installing a DG/Solar-Wind system?

- TVEC assesses an application fee for qualifying DG/Solar or Wind facilities. This fee varies with system size and will be determined based on installer plan documents.
- One trip to the location for the final inspection and DG meter installation is provided at no cost. If the installation fails to meet safety requirements or does not align with the TVEC installation processes & guidelines, a \$250 fee will be assessed to the Company/Installer (not the member). **All fees must be paid in full before permission to operate will be granted by TVEC.**

Acceptable line-side tap interconnection

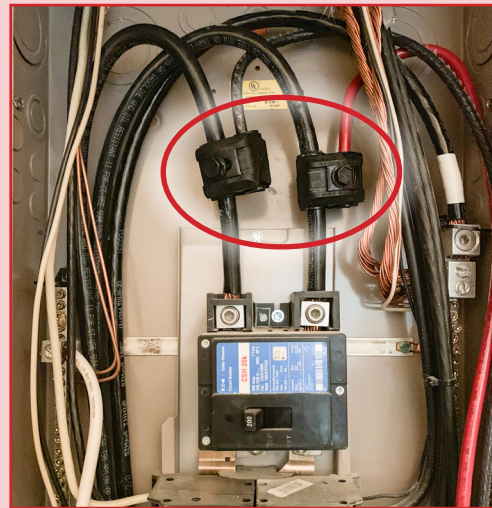
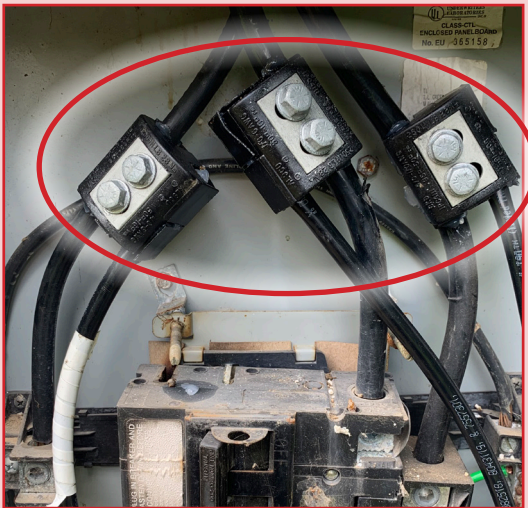


PLEASE WORK SAFE!

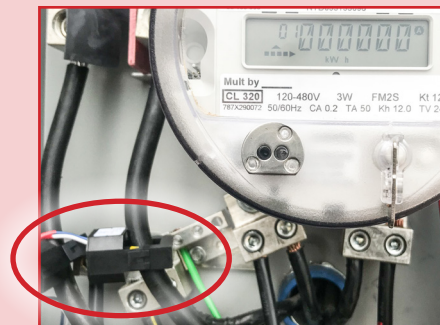
For the safety of installing personnel, please contact TVEC Member Services to schedule a temporary power disconnect by calling (800) 766-9576.

(Must be requested by TVEC Member)

Unacceptable line-side tap interconnection



**System monitoring
devices may not be
placed in the meter base.**



Acceptable DG System Labeling

All solar facility equipment must be labeled, including the system output meter, inverter, VLLD etc.

Example: This installation includes proper labeling and ideal layout of components.

Meters and switches should be no lower than 4' above ground level, and no higher than 6'.



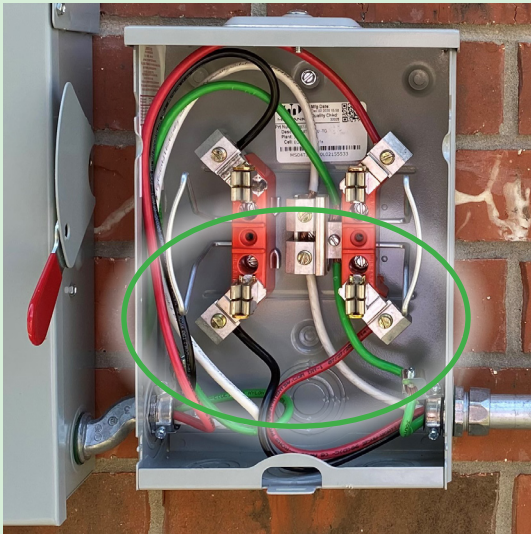
System warning labeling indicating DG system type and VLLD. VLLD must be blade type with handle.



System map showing system details and VLLD location is required when the VLLD is more than 10 feet from the utility meter or at the request of TVEC.

Production Meter Wiring / Example Layout

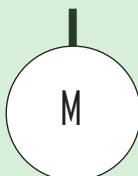
DG system total output meter base must be labeled, with DG output connected to the bottom (load side) meter connection points.



DG total output meter labeling

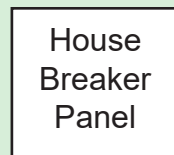


Electrical Grid Connection



Bi-Directional Billing Meter (provided by TVEC)

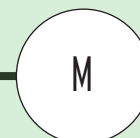
- DG system may be connected by either:
- A) Back-fed breaker setup through house breaker panel.
- B) Line-side tap in meter base (No jacket-piercing wire connections allowed)



Visible Lockable Labeled Disconnect

Member Solar/
Wind Installation

Solar/Wind
Power Inverter



Total DG Output Meter (provided by TVEC)



Distributed Generation Bill Example

The TVEC bill for members with Distributed Generation systems contains additional information pertaining to the DG system and detailing the excess energy production credited to the member during the billing period.

Member Usage:

This line indicates the total power (kWh) purchased from TVEC for the billing period.

Member Generated Excess Buyback:

This line indicates the total excess power (kWh) received by TVEC from the member's DG system, and the credit amount at the current buy back rate.

How much does TVEC pay for my excess Solar/Wind production?

- Excess energy (kWh, not consumed by the member) generated by the member's qualifying facility during the billing period and delivered back to the Cooperative is credited to the member at the Co-op's Avoided Cost, defined as the prior year average wholesale energy and fuel component. This is currently \$0.054403 per kWh as of February 1, 2022.

7009

PO Box 888
Kaufman, TX 75142-0888

Please see reverse side for explanation of
PCRF and customer charges

24 Hour Outage System - (800) 967-9324
24 Hour Automated Service - (800) 720-3584
Office - (972) 932-2214 or (800) 766-9576
Web Site - www.tvec.net

| ACCOUNT NUMBER | | ACCOUNT NAME | | RATE | CLASS | SERVICE ADDRESS | | METER NUMBER | | |
|---|--------------|--------------|--------------|--------------|--------------------------------------|-----------------|------------|--------------|-----------|---------|
| 0000000001 | | SAMPLE | | 78 | 2 | HSE | | 132283198 | | |
| SERVICE | FROM | TO | NO. DAYS | RDG CODE | PREVIOUS | PRESENT | MULTIPLIER | BASE RATE | KWH | CHARGES |
| CUSTOMER CHARGE (REVERSE SIDE) | | | | | | | | | | 20.00 |
| 01/11/20 | 02/11/20 | 31 | 2 | 4038 | 5790 | 1 | 0.104848 | x | 1752 | 183.68 |
| PCRF ADJUSTMENT (REVERSE SIDE) | | | | | | | | | | -17.52 |
| MEMBER GENERATED EXCESS BUYBACK | | | | | | | | | | -13.62 |
| OPERATION ROUND UP | | | | | | | | | | 0.46 |
| TOTAL CURRENT CHARGES DUE 03/09/20 | | | | | | | | | | 173.00 |
| PREVIOUS AMOUNT DUE | | | | | | | | | | 112.00 |
| THANK YOU FOR YOUR PAYMENT 02/06/20 | | | | | | | | | | -112.00 |
| PLEASE MAIL YOUR PAYMENT 5 BUSINESS DAYS PRIOR TO DUE DATE TO ENSURE TIMELY DELIVERY AND POSTING OF PAYMENT. | | | | | | | | | | |
| TOTAL DUE | | | | | | | | | \$ 173.00 | |
| COMPARISONS | DAYS SERVICE | TOTAL KWH | AVG. KWH/DAY | COST PER DAY | | | | | | |
| CURRENT BILLING PERIOD | 31 | 1752 | 57 | 6.01 | Disconnect Date/Amount | | | | | |
| PREVIOUS BILLING PERIOD | 31 | 1421 | 46 | 5.22 | CURRENT BILL Paid By 03/09/20 173.00 | | | | | |
| SAME PERIOD LAST YEAR | 31 | 3242 | 105 | 11.09 | Paid After 03/09/20 183.00 | | | | | |

Your Electricity Use Over The Last 13 Months

Track usage, pay bills and set alerts and reminders at TVEC.NET or on the myTVEC app, available for iOS and Android devices. Join the conversation with TVEC on Facebook, Twitter, YouTube and Instagram.

TO BE PAID BY DRAFT

Co-op News

Stay on track with your energy savings goals for 2020 with TVEC email and text alerts. Find daily usage alerts, high usage alerts, bill reminders and more at TVEC.net.

KEEP SEND TX0 1620F

PLEASE DETACH AND RETURN THIS PORTION WITH PAYMENT

PO Box 888
Kaufman, TX 75142-0888
(972) 932-2214 or (800) 766-9576
www.tvec.net
ADDRESS SERVICE REQUESTED

| ACCOUNT NUMBER | CYCLE | AMOUNT DUE |
|-------------------|----------|--------------------|
| 0000000001 | 171 | 173.00 |
| BILLING DATE | DUE DATE | AFTER DUE DATE PAY |
| 02/18/20 | 03/09/20 | 183.00 |
| ENTER AMOUNT PAID | | |

TO BE PAID BY DRAFT

23
5870

TRINITY VALLEY ELECTRIC COOPERATIVE INC
PO BOX 1228
KAUFMAN TX 75142-5403

01043 60193221005 6 0000000000 000023100 000024100 0



Distributed Generation Installation Requirements

Acknowledgment Form

TVEC will provide appropriate meters and monitoring for members to benefit from excess production of distributed generation installations at no additional charge to the member. This includes one dual-register billing meter and one DG system production meter.

Installations must meet the specifications and safety standards established by TVEC.

TVEC will conduct one inspection of the DG installation at no charge. **If the installation does not meet installation requirements at the initial inspection, TVEC will charge the system installer \$250 for each additional trip/inspection.**

Member

___ I have received the TVEC Distributed Generation Installation Requirements form.

___ I understand that the completed installation must conform to the requirements listed. Failure to do so may cause delays and additional costs to the system installer.

___ I understand that the TVEC Permission to Operate documentation will not be provided until all installation requirements are met.

Member Name: _____ TVEC Account Number: _____

Phone: _____ Email Address: _____

Service Address: _____

Signature: _____ Date: _____

Installer (if other than member)

___ I have received the TVEC Distributed Generation Installation Requirements form.

___ I understand that the completed installation must conform to the requirements listed. Failure to do so may cause delays and additional costs to the system installer.

___ I understand that the TVEC Permission to Operate documentation will not be provided until all installation requirements are met.

Name: _____ Title: _____

Installation Company Name: _____

Business Address: _____

Phone : _____ Email Address: _____

Signature: _____ Date: _____