

Distributed Energy Resource (DER) Interconnection and Net Metering Manual

I. DER Interconnection

A. DER Installation and Interconnection Policy

1. Policy Overview

- a. The primary objective of the City of Georgetown's Electric Power Distribution Utility (Utility) is to maintain the safety, reliability, and power quality of the electric power distribution system.
- b. The purpose of the Distributed Energy Resource (DER) Installation and Interconnection Policy is to ensure the safe interconnection of a customer owned DER installation and the parallel operation to the City of Georgetown's Electric Power Distribution system. It is the Utility's policy to fully recover all the costs associated with the DER interconnection application review and inspection process.
- c. The interconnection and parallel operation of a customer owned DER System is governed by the City of Georgetown's fully executed Agreement for Interconnection (IC) and Parallel Operation Of Distributed Energy Resource (DER). This Policy shall apply to the entire City of Georgetown electric service territory as defined by the Public Utility Commission of Texas (PUCT) approved Certificate of Convenience and Necessity (CCN).
- d. The Utility currently authorizes Residential and Small Commercial Customer-owned installation and interconnection of DER systems up to 10 kW-DC. The Net Energy Metering rate is available to the DER installations that meet these requirements.
- e. The Utility's DER interconnection application review and inspection process and the related fees outlined in this policy DO NOT replace the City of Georgetown's existing electric and construction permitting processes.

- f. This policy identifies the DER installation requirements, application submission and processing guidelines, installation inspection requirements, and the associated fees. All the outlined fees are non-refundable unless specified otherwise.
- g. The customer/applicant requesting the DER interconnection is responsible for the DER system design, installation, compliance with the Utility's requirements, and payment of fees and costs associated with the DER interconnection application review and inspection process.
- h. The proposed DER installation and interconnection shall follow DER installation and interconnection requirements, the electric utility's engineering and construction standards, the Unified Development Code of the City of Georgetown, and the latest edition of the National Electric Safety Code (NESC) and National Electric Code (NEC). Any non-compliance with the electric utility requirements will result in the delay and/or denial of the DER interconnection request.

2. DER Installation and Interconnection Application Submission and Processing

The DER installation and interconnection application is accepted only through the Utility's authorized online submission portal. Once the DER installation and interconnection request is received the Utility will review the application for compliance with the Utility's requirements and notify the customer/applicant of any objections, perform system impact review, followed by installation inspection, preparation, and approval of Interconnection Agreement.

Step 1: Application Submission

1. Customer/applicant registers as an installer on to the Utility's authorized online submission portal by filling out the Installer Registration Form. If there are not any duplicate entries found or corrections needed for registration; the registration is approved by the Utility.

Once registered, the installer/customer/applicant submits the DER installation and interconnection application along with the following items:

- a. Specifications and Installation drawings and any related information requested
- b. Non-Refundable DER installation and interconnection Application Fee

Step 2: Application Review

1. The Utility will perform an internal review of the complete submitted application. An application is considered complete only upon receipt of items and application included in Step 1. The application review entails the following:
 - a. The applicant is a residential or small general customer (net metering is currently only applicable to these classes).
 - b. The proposed system size is 10kW or less.
 - c. Proposed installation and equipment are consistent with specifications and U/L requirements including automatic disconnect.
 - d. System Impact Evaluation to determine if any Electric Distribution Infrastructure Modifications/upgrades are required to accommodate the proposed interconnection. Any required infrastructure modifications/upgrades will be governed by the Electric Line Extension and Electric Meter Connect Policy.
2. If the City of Georgetown permitting requirements are met, and the submitted application complies with Utility standards and requirements, the DER installation and interconnection application is approved, and the customer is notified.
3. If the proposed DER interconnection requires Electric Distribution Infrastructure modifications or upgrades the applicant is notified of the need for modifications or upgrades and a Facilities Study is recommended.
 - a. The detailed costs of any Electric Distribution Infrastructure Modifications/upgrades necessary to interconnect the Applicant's proposed DER facility will be identified in a Facilities Study to be completed by the Utility. The modifications and/or upgrades identified in the facilities study will be governed by the Line Extension Policy.
 - b. A nonrefundable facilities study fee is required to be paid in full if the customer/applicant wishes to continue through the interconnection process. Please note that the facilities study fee is for DER systems up to 10 kW-DC by Residential and Small Commercial Customers.
 - c. The modifications and/or upgrades identified by the facilities study shall be completed before the DER application is approved.

Step 3: Installation- Preliminary Inspection

1. Upon approval of the DER application, the applicant is required to pay a nonrefundable DER Installation and Inspection Fee. Once installation and inspection fees are paid in full, the Utility issues the DER Installation Authorization to the applicant. Once the authorization is issued the applicant is authorized to begin the installation of the DER system at the approved site. The installer is required to follow the labeling, wiring, and clearance instructions of the approved installation equipment throughout this process.
2. The applicant can request a preliminary installation inspection to be performed by the Utility by submitting all the Utility required installation information. The information to be submitted must comply with the specifications outlined by the Utility. The Utility shall conduct the preliminary inspection only after the required installation information is submitted.
3. After receiving the required installation information, the Utility shall conduct the preliminary inspection of the installation to ensure conformity to the interconnection requirements and guidelines.
4. If the DER installation meets all the interconnection requirements and guidelines, the installation is approved by the Utility and the Interconnection Agreement (IC) is generated.

Step 4: Installation- Final Inspection and Meter Installation

1. Once the Interconnection Agreement is executed by the customer/applicant, the Utility conducts a final site installation by the meter technician. The primary objective of the final inspection is to verify the installation information and to test the auto-disconnect relay. Once all the requirements are met, the installation passes the final inspection, and the bi-directional meter is installed.
2. If issues, updates, or repairs are identified by the meter technician, the Utility will notify the customer/ installer of a failed inspection, and the meter will not be installed. In this instance, the applicant is required to address the issues identified and request a second inspection. The second inspection and any additional inspections require the payment of a nonrefundable Additional Inspection Fee per inspection instance.
3. After successful inspection and installation, the Interconnection Agreement is fully executed, and the customer/installer is notified with

permission to operate. The approved and installed DER system information is updated in the Utility's GIS and billing systems.

B. The Interconnection Process

1. Pre-Application Steps:

1. Consider if Interconnection is Right for You

- a. Consider all the costs that are associated with installation and interconnection.
- b. Review the requirements that are detailed by the City in the Interconnection and Installation Policy.
- c. Review the potential savings based on your system in the Net Metering Policy.
- d. Review the FAQs on the DER page (link provided)

2. Choose an Installer

- a. There are many installers in the area. Please shop around to see which installer is right for you.
- b. Tips to help choose an installer are provided in the FAQ section

3. Confer with Installer

- a. Discuss with your installer what is the best installation for you
- b. Discuss with your installer what the appropriate steps and costs will need to take place to an install the proposed DER.
- c. Ensure there is appropriate communication between the installer, the City, and you.

2. Installer Interconnection Steps:

1. Application Submission

- Once a customer has decided to install a DER and has a chosen an installer, the installer must then register as an installer on the Interconnection Portal.
- Once the installer is certified in the Portal, the installer must then submit the application along with the DER specifications, drawings, and application fee.

2. Utility Application Review

- If permitting requirements are met, the application is approved

- If interconnection requires electric infrastructure modifications are needed, a Facilities Study is recommended, and must be performed along with the associated fees to continue interconnection process; once this is done, the application is approved
- Upon approval of application, an installation and inspection fee is due to continue interconnection.

3. DER Installation Authorization Issued

- Upon approval of application and appropriate fees are paid, an authorization for construction is issued.

4. Preliminary Installation Inspection

- After construction of the DER system, the installer must contact the Utility through the interconnection portal to conduct the preliminary installation inspection and submit the required installation information

5. Interconnection Agreement Generated

- Upon approval of the preliminary installation inspection, the Interconnection Agreement is generated, and must be executed by the customer. Once this is done, the Utility is notified to conduct a final inspection of the DER site.

6. Final Inspection

- Includes an onsite visit in which the installation information is verified, and tested by a meter technician.

7. Meter Installation

- Upon passing the final inspection, the bi-directional meter is installed at the DER site.
- If there is a failure of the inspection, the meter is not installed, and the installer is notified to address the issue.
- If there is an instance of failure, a fee to reinspect the DER is site issued and is to be paid before further action is taken

8. Permission to Operate

- After successful installation and inspection, the Interconnection Agreement is fully executed by the Utility and customer is notified with Permission to Operate.
- The DER system is updated in the Utility's GIS and Billing systems

C. Fee Schedule

Fee Description*	Amount
DER Installation and Interconnection Application Inspection Fee	\$250
Facilities Fee**	\$1,000
DER Installation and Inspection Fee	\$450
Additional Inspection Fee**	\$150

***All fees identified as non-refundable**

****As needed**

D. FAQ's

What is an Interconnection Agreement?

An Interconnection Agreement is the agreement between the customer and the City, which allows the customer to interconnect their DER to the Georgetown power grid in order to generate electricity. This agreement is initiated by the installer by submitting an Interconnection Application within the [Interconnection Portal](#).

Can I install a DER exclusively for backup purposes without having to connect to the electric grid?

Yes, you can operate your DER system separate from interconnection with the Georgetown electric distribution system. However, if you wish to operate the system parallel or interconnected with the Georgetown system, you and your system must abide by City interconnection policies, guidelines, regulations, and code requirements.

I want to learn more about solar/photovoltaic systems.

[Here is a link for reference from the US Department of Energy](#) that provides a general background of solar/ PV systems.

Will my net metered solar installation continue to provide power during a power outage?

No, unless there is a battery or generator back up system, the solar installation tied to the grid will not produce power when the grid is down. This is to ensure the safety of our field crews and is required by law (IEEE 1547).

What size of system can I install?

The approved system size that can be allowed for interconnection and participation in the Net Energy Metering program is set at 10kW-DC. Anything larger will not be approved for interconnection. The program is only available to residential and small commercial customers.

Does the City of Georgetown have a list of recommended installers?

The City of Georgetown does not endorse any installers. We urge the customers to shop around and compare offers from multiple installers.

Who is responsible for submitting the interconnection application with the city? Me or the installer?

Installers will follow this [link to the interconnection portal](#) to begin interconnection process. It is advised that the one who is actually installing the DER system to facilitate the interconnection process with the City.

What is the turnaround time for processing the interconnection application?

Permission to operate will be provided within 30 days of the interconnection submission date provided appropriate fees and processing of interconnection is also being conducted by the customer or installer.

What if I decide to remove my system or decide to move?

You must notify the City at Customer Care- 512-930-3640 or at customercare@georgetown.org prior to moving so updates can be made to move your new address or remove you from the appropriate billing.

There is an existing DER on the home I just purchased. How do I get the interconnection agreement and billing transferred to my name?

Please email customercare@georgetown.org or call at 512-930-3640 with your name, address, phone number, and email to complete the transfer of ownership of the DER.

What if I want to make changes to my system?

If you wish to make changes to your changes, you must apply for the changes, and commence the interconnection application process once again. Please be aware of the system size that the City allows when considering this.

Do I still need to apply for any additional permits?

Only in an instance that a service upgrade or rebuild is required for the customer location in question is when an electric permit is required. Please contact the Permitting and Inspections department if you believe this is the case at permits@georgetown.org

If there are any further technical questions regarding interconnection and installation, please contact the interconnection group at interconnection@georgetown.org

II. Net Energy Metering

A. Eligibility

Net Energy Metering is available to residential and small general service customers within the City of Georgetown (COG) electric service area that own distributed energy resource (DER) facilities.

The following requirements must be met for customers to be served under Net Metering Service:

1. Customer has executed an interconnection agreement with COG, and COG has approved their completed net metering service application.
2. DER facility is customer owned and powered by a renewable resource, including but not limited to solar, wind, and geothermal sources.
3. For all DER facilities approved by the City after October 1, 2020, the DER facility's installed capacity must be no greater than ten kW-DC (kilo watts direct current) and receives service at 600 volts or less.
4. DER facility is located at the customer's premises or that is appropriately connected to COG's electric distribution system, as solely determined by COG.

B. Rate Schedule

1. Summary of Billing Charges

- a. Volumetric Energy**-the amount of energy delivered from the grid to the customer's premise.

- b. Renewable Energy Received-** excess energy generated from the customer’s DER system that is not consumed onsite and is therefore sent to the grid.
- c. Renewable Energy Generated-** the total energy produced by the customer’s DER system for the service period. This is determined by the REC meter. This will no longer be available for installation on 10/01/2021. **No charges are associated with this item.**

2. Monthly Rates for Net Metering Customers

a. Residential Service

Base Rate	\$24.80/month
Volumetric Energy Charge	\$0.09580/kWh
Renewable Energy Credit	\$0.09580 per kWh
Power Cost Adjustment Factor	\$ 0.01375 as of 01/01/2021 (subject to change)

b. Small General Service

Base Rate	\$50.00/month
Volumetric Energy Charge	\$0.0902/kWh
Renewable Energy Credit	\$0.09580 per kWh
Power Cost Adjustment Factor	\$ 0.01375 as of 01/01/2021 (subject to change)

- c. These rates eligible for customers who are in good standing as of 10/01/2020. The renewable energy credit is subject to change after 09/30/2022.**

3. Renewable Energy Received Credit

- a. The renewable energy received credit is calculated by the following formula:**

$$Credit \left(\frac{\$}{kWh} \right) = \frac{Weighted \text{ Avg. Market Price } \left(\frac{\$}{kWh} \right) + Avg. \text{ Transmission Capacity Cost } \left(\frac{\$}{kWh} \right)}{1 - Losses (\%)}$$

- b. The renewable energy received credit may be adjusted on an annual basis by the City using the above formula**

4. Limit on Renewable Energy Received Credit

- a. For a billing cycle, and for the purposes of calculating the renewable energy received credit, the excess renewable energy (kWh) the City receives from Net Metering customers cannot be greater than the volumetric energy (kWh) the City delivers to the customer's premises. Renewable energy received that is in excess of the volumetric energy during the billing cycle is not eligible for compensation to the Net Meter customer by the City. Such excess energy may not be banked by the Net Meter customer nor rolled over to the following or future billing period(s). Further, such excess energy cannot be utilized to offset other charges on the customer bill.

C. FAQ's

How is my bill going to be calculated?

CURRENT CHARGES (ELECTRIC)			
R15796466 & R14188980			
Description	Quantity	Price	Amount
Base Rate	1 Month	24.800000	24.80
Volumetric Charges (per kWh)	214 kWh	0.095800	20.50
Renewable Energy - Generated	399 kWh	0.000000	0.00
Renewable energy- Received	214 kWh	-0.095800	-20.50
PCA	214 kWh	0.013750	2.94
Subtotal electric			27.74
Tax			0.96
Total electric			28.70

Customers installed before 10/01/2021 have 2 meters:
1st- Net Meter
2nd- Renewable Generated
Customers installed after 10/01/2021 have only the Net Meter

214 kWh was the amount purchased by the customer from the utility.

399 kWh was Generated by the customers solar

214 kWh was the amount of solar energy that was produced and unused by the customer and received by the utility. *The excess renewable energy COG receives cannot be greater than the volumetric energy delivered to the customer. This is why the Received is capped at 214 in this example.

The Received rate depends upon the installation date of the solar panel system. See net metering policy.

The Net Meter is a bi-directional meter that captures the amount of energy the utility delivered to the customer (volumetric) and received from the customer.

The Renewable Generated (REC) meter captures the overall amount of solar energy the customer generated. Beginning 10/01/2021, REC Meter will no longer be installed.

CONSUMPTION DETAILS					
Electric					
Meter ID	Start read	End read	Description	Multiplier	Usage
R15796466	26015	26321	Renew_Rec	1	306 kWh
R15796466	33637	33851	kWh	1	214 kWh
R14188980	38551	38950	Renew_Gen	1	399 kWh

Bill Calculation: Use the Consumption Details on the back of the bill. Subtract the amount of the Received from the Renewable Generated consumption. Add that to the amount purchased from the utility (volumetric).

Example: **399 kWh – 306 kWh = 93 kWh + 214 kWh = 307 kWh total used**

What is Net Metering?

Net energy metering is defined as the process of netting a customer’s electric consumption against the customer’s electric generation at a defined frequency (e.g., every 15-minutes, every hour, etc.). Essentially, this rate program allows residential and small commercial customers with DER systems less than 10kW-DC and interconnection agreement to sell the excess energy generated by their DER system (in excess of their consumption) at the rate identified in the program. Typically, this allows for lower monthly costs.

How does the bi-directional meter work?

When a customer generates less energy than they consume, the Utility provides electricity to the customer and the bi-directional meter measures that amount as volumetric energy. Conversely, when the customer generates more energy than they consume, the excess energy (received energy) is sent back to the Utility and the bi-directional meter measures that amount as received energy. At the end of each billing period, the Utility uses the volumetric and received energy measurement readings from the meter to calculate the customer’s bill.

If I don’t have a REC meter, how will I know what my DER generates?

Most DER systems monitor the energy produced by your system. You can then reference the reported amount from your system and compare it to your bill. See the bill calculation image above for further assistance.

Are there any surcharges once my system is operational?

There are not any surcharges once the system is operational. Enjoy your cost savings!

What happens if I generate more electricity than I use?

The maximum amount of energy that can be sold to Georgetown cannot be greater than the volumetric energy delivered to the customer.

Is there a way to estimate my billing?

Link to this site to project billing: <http://pvwatts.nrel.gov/>

Are there any rebates for installation?

At this time, there are not any rebates for installation of DER systems to the customer from the City. Confer with your installer for any further information.

My system is installed, how long will it take for my account to start reflecting the billing changes?

Once a work order has been issued when interconnection is approved, it will take anywhere from 5-10 business days for the new meter to be installed and for your billing to begin reflecting the net meter changes.

I went through the interconnection process, a meter was connected, but I am not seeing the appropriate changes that I was expecting on my bill. Is there something wrong or will I be charged for additional inspection?

1. Please review the Net Energy Metering bill calculation to ensure you fully understand the credit for excess energy. [The Net Energy Metering ordinance can also be accessed here.](#)
2. Contact your installer if your system is not producing the estimated energy
3. If there are any further questions regarding billing, please contact Customer Care at customercare@georgetown.org or at 512-930-3640.

I have sized my system appropriately to my usage and I am still having to pay an electric bill. I thought this was supposed to offset my charges on my bill?

You can possibly offset all of the volumetric charges on your bill. Keep in mind that there are base and PCA charges that can't be offset. Please see [the Net Energy Metering ordinance here](#) for more information. Please note that the amount of energy that can be sold back cannot be greater than the energy supplied by the Utility.