To:	**Planning & Development Services Customers**
Subject:	**Solar - Photovoltaic System Installation Requirements (Commercial/Residential)**
Date:	February 16, 2024
Created By:	**Building Safety Division**

Purpose:

The purpose of this bulletin is to provide information on the process for a homeowner or business owner in the City of New Braunfels who wishes to have installed a solar – photovoltaic system on their property and commission it for use in conjunction with New Braunfels Utility (NBU) service or other utility provider within the city limits. NBU is the primary utility provider in the New Braunfels area and thereby assisted in the preparation of this document. The permitting, inspection, and commissioning processes described here are intended to provide pertinent information to residents, contractors, and electricians and to facilitate an improved permitting and construction process for our customers.

Scope:

A successful installation of solar-photovoltaic equipment requires the coordinated effort of a qualified contractor and electrician, the City of New Braunfels Building Safety Division, and the utility provider. We highly recommend that applicants submit their applications and required documents to both agencies simultaneously.

NBU Process:

For NBU process see the Solar Interconnection Steps flyer at the end of this bulletin.

City of New Braunfels (CoNB) Process:

Residential Process Steps:

1. The homeowner should contract with a licensed and registered contractor to provide the photovoltaic system improvements on their home.
2. The contractor submits to CoNB for a residential solar permit thru the online permit portal and will also need an electrical permit. See the solar permit checklist (attached) for all required items for a complete submittal. For the solar permit with CoNB there must be a registered general contractor and a licensed electrical contractor. The same contractor may have both registrations, but this is not always the case.
3. The contractor responds to all review comments and supplies the required information until the residential solar permit is issued by the CoNB.

4. The contractor notifies the utility provider that the CoNB permit has been approved and provides the permit number before receiving authorization to proceed. The CoNB permitting system will also send an automatic notice to NBU that the permit has been issued at COGen@nbutexas.com
5. The contractor installs the photovoltaic equipment in accordance with the approved design and specifications but makes no modifications to the service panel.
6. Contractor schedules the service disconnect (if required) with the utility provider and schedules inspection with CoNB Building Inspections for the same day, informing the inspections team that it is a solar permit, Disconnect/Reconnect (D&R) inspection.
7. Only the utility provider can disconnect the service. When the utility provider is NBU, NBU staff will perform an on-site inspection to determine readiness prior to disconnecting. The contractor must be present for this inspection.
8. Contractor rebuilds the service inter-connect per the utility provider's specifications and current adopted NEC code.
9. CoNB Building inspector will inspect the system installation on the customer side. Result of the inspection, Pass/Fail, is sent by email to the inspection contact with notification of any deficiencies. The CoNB permitting system will also send an automatic notification to NBU when the D&R inspection result is a Pass. COGen@nbutexas.com; solaroperations@nbutexas.com
10. When CoNB has approved the inspection, the inspection contact forwards the result of the inspection to the utility provider by forwarding the city email notification and requesting reconnection of service. NBU also requires photos of the service to be sent at this step, at Pass notify: COGen@nbutexas.com; (See NBU process steps Item 4)
11. Utility provider inspects the inter-connect and if approved reconnects the service. In the case of corrections needed the contractor will be notified to make the corrections and request re-inspection as soon as possible.
12. After successful reconnection of service and completion of the project scope, the contractor schedules an Electrical Final inspection with CoNB.
13. Upon receiving a Pass on final inspection, the city permit is closed. The City of New Braunfels permitting system will send an automatic notification to NBU when the Final Inspection result is a Pass at COGen@nbutexas.com.

Commercial Process Steps:

1. The commercial property owner should contract with a licensed and registered contractor to provide the photovoltaic system improvements on their building.
2. The contractor submits to CoNB for a commercial solar permit thru the online permit portal. See the solar permit checklist (attached) for all required items for a complete submittal. For the Solar permit with CoNB there must be a registered general contractor and a licensed electrical contractor. The same contractor may have both registrations, but this is not always the case.
3. The contractor responds to all review comments and supplies the required information until the commercial solar permit is issued by the CoNB.

4. When the permit is issued, the contractor notifies the utility provider that the CoNB permit has been approved and provides the permit number before receiving authorization to proceed. The CoNB permitting system will also send an automatic notice to NBU that the permit has been issued at COGen@nbutexas.com.
5. The contractor installs the photovoltaic equipment in accordance with the approved design and specifications but makes no modifications to the service panel.
6. Contractor schedules the service disconnect (if required) with the utility provider and schedules inspection with CoNB Building Inspections for the same day, informing the inspections team that it is a solar permit, Disconnect/Reconnect (D&R) inspection.
7. Only the utility provider can disconnect the service. When the utility provider is NBU, NBU staff will perform an on-site inspection to determine readiness prior to disconnecting. The contractor must be present for this inspection.
8. Contractor rebuilds the service inter-connect per the utility provider's specifications and current adopted NEC code.
9. CoNB Building inspector will inspect the system installation on the customer side. Result of the inspection, Pass/Fail, is sent by email to the inspection contact with notification of any deficiencies. The CoNB permitting system will also send an automatic notification to NBU when the D&R inspection result is a Pass. COGen@nbutexas.com; solaroperations@nbutexas.com
10. When CoNB has approved the inspection, the inspection contact forwards the result of the inspection to the utility provider by forwarding the city email notification and requesting reconnection of service. NBU also requires photos of the service to be sent at this step. At Pass notify: COGen@nbutexas.com; (See NBU process steps Item 4)
11. Utility provider inspects the inter-connect and if approved reconnects the service. In the case of corrections needed the contractor will make the corrections and request re-inspection as soon as possible.
12. After reconnection of service the contractor schedules an Electrical Final inspection with CoNB.
13. Upon receiving a Passing final inspection, the city permit is closed. The City of New Braunfels permitting system will send an automatic notification to NBU when the Final Inspection result is a Passat COGen@nbutexas.com

For more information on the Permit Portal or Online Payments see CoNB website at;

https://www.newbraunfels.gov/3433/Building-Permits

Additional Information:

Solar Permit Submittal Checklist for City of New Braunfels (Commercial or Residential):

1. Site Plan – must include property lines, existing structures footprint, proposed structures location, main service panel location, photovoltaic equipment and locations.
2. Roof Plan with location of proposed improvements, type of roof deck, rafter or beam sizes and spacing, roof slope, roof vent locations, fastening method and specifications for arrays or panels.
3. Structural Engineer's Letter – Certifying existing roof has structural capacity to accommodate the proposed loads or Structural Engineer's plans for reinforcement or modification of the roof/ structure to accommodate the proposed loads.
4. Engineered electrical plan including size and type of conductors, voltage and amperage of all circuits, type of over-current protection, disconnection devices – AC and DC.
5. Manufacturer's specifications and listing information for all equipment.

Summary:

To schedule inspections with NBU; email COGEN@NBUTEXAS.com
For information on NBU solar process see last two pages of this document, Solar Interconnection Steps.

For NBU specifications, go to https://www.nbutexas.com/electric-connection-policy/

To schedule inspections with the CoNB visit the City's online permitting portal, which you can find here: https://nbpermits.nbtexas.org/publicaccess/template/Login.aspx. The project must have a valid and issued permit for the inspection to proceed.

Specific questions pertaining to the installation and inspections of these systems can be directed to the Chief Building Inspector at MattGarcia@newbraunfels.gov.

Specific questions pertaining to permitting and reviews of these systems can be directed to the Building Official at Building@newbraunfels.gov .

For other information call the Building Safety Division at (830) 221-4041

This bulletin is provided as a customer service initiative.

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Solar Interconnection Steps

NBU regularly receives reports that solar vendors assert a partnership or other affiliations with NBU to bring solar to the community. Be sure your sales teams know that they shall not claim any partnership or other affiliation with NBU or NBU programs.

Please review and follow the interconnection process below.

Step 1. Ensure that the following information has been provided:

Owner Name
Project Address
Owner email address
Owner phone number
Owner NBU account number
NOTE: Customer-Owned Generation shall not be owned by any party other than the NBU account holder.

Specification sheets for any and all String/Micro Inverter(s), PV modules, battery storage, MID, generator, and/or ATS being proposed for the site.

One-Line Diagram of interconnection.

Top Down Site Plan showing the following:
Panel locations on rooftop.
Location of equipment including fences. Utility service equipment and PV disconnect shall not be behind a fence without specific prior authorization.

Number of panels, tilt, and azimuth for all arrays.

If installing a PV only system, include the dimensions of the tap/gutter box.

Front View Site Plan showing the following:
All existing and proposed enclosures, all conduit runs, all grounding systems and any racks if applicable.
Racks must meet NBU specifications.

Proof of approved permit from (AHJ) Authority Having Jurisdiction (i.e. Guadalupe County Fire Marshal's Office, City of New Braunfels, or City of Schertz).

Step 2. Authorization to Proceed:

NBU will issue written Authorization to Proceed (ATP) when the utility is satisfied with the proposed installation per review of system submittal. Authorization to proceed is valid for 90 days from the date of written notice. Reasonable extensions can be applied on a case by case basis.

Step 3. Schedule Disconnect and Reconnect:

Contact solaroperations@nbutexas.com to schedule disconnection of existing service. Provide the contractor's miscellaneous billing account number, authorization to bill the charges, and a phone number for scheduling. There will be a $75 charge. Additional charges may apply for afterhours reconnections.
Important: Schedule D&R inspection with the AHJ (i.e. City of New Braunfels, or City of Schertz) for the date of disconnection.

Step 4. On the date of Disconnect and Reconnect:

The contractor must present the NBU-approved plan set with a signed and dated approval stamp before service will be disconnected.
Contractor must confirm an inspection has already been scheduled with the AHJ (i.e. City of New Braunfels, or City of Schertz).
Important: To request a reconnection, submit proof of approved AHJ inspection and photos of the installed electrical equipment to COGEN@NBUTEXAS.com.

Please include an overall view photo of the installed electrical equipment with all enclosures open, showing the conduit runs, a photo of each open enclosure with wiring and support screws visible and a photo of the overcurrent protection in the AC disconnect.

NBU Electric Operations will install a relevant meter when construction is complete according to the NBU approved plan set. Once the Generation meter is set the customer will be billed the monthly Delivery Point charge detailed in the ATP notice.

Step 5. Schedule Final Inspection with the AHJ:

Contact the AHJ (i.e. Guadalupe County Fire Marshal's Office, City of New Braunfels, or City of Schertz) to schedule the final inspection. **Installer must provide NBU the final inspection report from the AHJ before system verification will be scheduled.**

Step 6. Schedule System Verification with NBU:

Contact COGen@nbutexas.com to schedule the system verification. There will be a $100 charge. A technician who can operate the system, take voltage measurements, and show production shall attend the verification. Re-inspection fees of $100 will be assessed by Solar Engineering as applicable. NBU Electric Engineering will issue written PTO once all above requirements are satisfied.

Step 7. Submit Rebate Application to der@nbutexas.com.

Notices:
Do not cut NBU meter seals.
Customer Owned Generation systems found in operation prior to Permission to Operate (PTO) being issued will result in a $500 fee.
The Unauthorized generator or the electric service itself may be disconnected entirely.

New Contactors must establish a Miscellaneous Billing Account:
Contact NBU New Construction Services at newconstruction@nbutexas.com for instructions.