

# **New Solar Market Development Tax Credit Form and Submittal Instructions August 2020**

## **Greetings!**

The New Mexico State Legislature passed Senate Bill 29 in early 2020. This bill re-started the popular residential solar tax credit program. This tax credit is based upon ten percent of the solar system value and is available for solar thermal and photovoltaic solar systems. The maximum tax credit per taxpayer per year is \$6,000.

The Energy Conservation and Management Team has been working hard to provide forms and a submission process that reduces application errors, speeds the application, and promotes the solar energy industry through collection of industry data.

## **Document Arrangement**

This document has three sections.

The first section relates the general process of applying for the tax credit and introduces the electronic portal where the applications are submitted.

The second section is a review of the information required by the forms and how that information is entered into the application form(s).

The third section is a listing of the software reviewed for compatibility with the electronic forms. Please note that if you use a PDF filler other than the recommended software, the results with the forms may be mixed, and features in the forms that provide help in filling out the forms may not be available.

## Section One

**Using the electronic portal to submit the application forms.** The fillable forms were created using an Adobe PDF compatible application and were based upon the forms used in the last year (2015-2016) of the previous Solar Market Development Tax Credit program. The new forms can be located on the EMNRD/ECMD website here:

<http://www.emnrd.state.nm.us/ECMD/FORMS/forms.html>

The Form File is a single file which contains all the forms used in filing for the New Solar Market Development Tax Credit program.

When the Form File is filled out (see Section Two for help) the file can be uploaded to the electronic portal. The upload requires both the Form File and the single Supporting PDF file containing the supporting information and any ink & pen signed forms to be **uploaded at the same time**.

The electronic portal is located here:

<https://wwwapps.emnrd.state.nm.us/ECMD/NSMDSubmissions/default.aspx>

Successful applications to the portal will receive this email message:

Dear ***Your Name***,

Your NSMDTC documentation was submitted to ECMD for review on ***Date and Time***.

An ECMD administrator will contact you if more information is needed to complete the application review.

Thank you.

This email address is for announcements only, please do not respond to this account.

## Entering the portal

If you have completed the Filled Form and collected the supporting information into one PDF file, then you can access the electronic portal shown above.

The electronic portal will request information to be provided:

### Step 3:

Fill in your contact information so that we may reach out to you when processing your application. (\* denotes required field)

**Contact Information**

Prefix:

First Name:  \*

Middle Name:

Last Name:  \*

Phone:  \*

Alt. Phone:

Email:  \*

Locations of the Form File and the supporting file will need to be navigated on the local computer and shown in the boxes under the client information.

Once the two files are added the **Submit** can be selected. The processing can take up to a minute depending upon the link speed, the computer speeds and activity on the portal.

An email will be generated as noted above that will announce a successful submission.

## Application by mail

If an applicant chooses to submit a tax credit by mail:

When using the United States Postal Service, please address the envelopes to:

**New Solar Market Development Tax Credit Administrator  
EMNRD Energy Conservation and Management Division  
Room 184  
Wendell Chino Building  
1220 S. Saint Francis Drive  
Santa Fe, NM 87505**

If using a package delivery service use the same address but include a phone number:

Phone number for package delivery is 505-476-3310

## Section Two

### Overview of the application process:

The application starts with the download of the application form “Solar Market Forms V1.0” from the ECMD website: <http://www.emnrd.state.nm.us/ecmd/FORMS/forms.html>

This one application form contains all of the forms to apply for the tax credit and is designed to collect the installed system information for either solar thermal or photovoltaic systems, the installer information, the building inspection results and the various invoices documenting the system. Information entered once is copied across forms to provide a complete documentation package consistent with the adopted rules for this tax credit program.

The paper application forms are numbered Form 1 through Form 5, with a checklist Form 0 (zero) and a Form BCA – Building Code Authority. Printing paper copies of the Forms can be done by using the print function on your computer.

Substantiating information for the solar system is to be provided by either the installer or the taxpayer.

FORM TIP: WHEN CALLING CONCERNING INFORMATION IN A FIELD, PLEASE TELL THE ADVISOR THE FORM NUMBER AND THE FIND NUMBER (THE LITTLE NUMBER NEXT TO A FIELD TITLE).



1*Name	First Name
2 *BUILDING CODE AUTHORITY (BCA)	

RED INFORMATION FIELD ON THE FORM.

### Form 0

#### Application Checklist

This form was designed to allow an applicant or the installer to collect the desired information and establish an order to the application paperwork. Shown below is the top of the checklist showing the Form 0 through Form 4. Please note that not all forms are required when applying, and that some information may be satisfied in multiple ways.

For most residential PV systems, Form 1 and Form 2 would be required along with Form 4 for a PV system. Supporting information noted as A-1 through A-5 is required, and those items are listed on the following page.

**Form 0 Residential Solar NMAC 3.3.14**  
**Solar System Certification Application Checklist**

New Solar Market Development Tax Credit Form 0 Version 072420

For ECMD USE Only

NM Taxpayer Information						
1 Name:	<div style="display: flex; justify-content: space-between;"> <span>First Name</span> <span>MI</span> <span>Last Name</span> </div>			Contact Info:	Phone Number with Area Code	
<p>Use this Checklist to ensure you have a complete application package. Forms 1 through 3 are available from the Solar Market Development section of the website above or may be provided as completed documents if you employed a contractor. Attachments (A-1 to A-5) are supporting documents from the tax assessor, contractor, or the utility.</p>						
<p><b>Application completed date:</b></p> <div style="display: flex; justify-content: space-around;"> <span>Month</span> <span>Day</span> <span>Year</span> </div>						
Document Order in Application Package	Form	Form Name	Complete Criteria √	Part of Application Package? √		For ECMD USE
1	0	Application Checklist				
2	1	Solar System Certification Application	Signed ? Dated ? SSN/EIN filled in?	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	
3	2	Solar PV System Installation Form	Signed ? Dated ?	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	
4	BCA	Solar System BCA / Inspection Report	Optional if Form 2 is complete in BCA block Signed ? / Dated?	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	
5	3	Solar Thermal Installation Form	Signed ? Dated ?	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	
6	BCA	Solar System BCA / Inspection Report	Optional if Form 3 is complete in BCA block Signed ? / Dated?	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	
7	4	Taxpayer and PV Contractor SOU	Signed ? Dated ?	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	
8	4	Taxpayer & Thermal Contractor SOU	Signed ? Dated ?	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	

**Form 0**  
**Application Checklist – Supporting Information**

This bottom half of the Form 0 Application Checklists, shown below, is a list of the supporting information required with the application. Common to both solar thermal and photovoltaic systems is the supporting information A-1, A-2, A-3, A-4, and A-5:

A-1, Property Tax Bill or Notice of Valuation from the local tax assessor that has the applicant’s name(s) for the solar tax credit. If the name on the tax document does not match the applicant’s name, an explanation letter is to be attached with the property tax document.

A-2, Invoice showing the amount paid for the solar system. The contractor or installer should provide the system invoice. If the system required multiple invoices, provide a listing with a sum of the invoices and the multiple invoices. Small receipts should be taped to an 8 ½ X 11 sheet of paper and photocopied.

A-3, Design or Schematic is a requirement showing the schematic or the design for the solar system. This design may have to be provided as multiple pages of 8 ½ X 11 paper, with the desire that the information provided is mostly readable.

A-4a, Interconnect agreement with the local utility. For on-grid photovoltaic systems, the interconnect contract number and the signature page are required. The complete interconnect agreement is *not* required. This should be provided by the local utility. This item is not required for an off-grid system.

A-4b, SRCC certification form for the solar collector is required for solar thermal systems. The contractor or installer should provide this certification.

A-5, Building Code Inspection report. For a PV system the desired inspection report to be included is the electrical inspector’s report. For a solar thermal system, the mechanical inspector’s report is desired. If the printed inspection report form is not available, there is the Form BCA which is provided to allow the inspector to sign that the inspection was completed.

			Dated ?	<input type="checkbox"/>		
7	4	Taxpayer and PV Contractor SOU	Signed ? Dated ?	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	
8	4	Taxpayer & Thermal Contractor SOU	Signed ? Dated ?	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	
9	5	Business/LLC/LLP Form	FEIN? Signed ? Dated ?	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	
10	A-1	Property Tax Bill, or Notice of Valuation	Appl' name listed? LLC / LLP / Co. ?	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	
11	A-2	Invoice(s)			<input type="checkbox"/>	
12a	A-3	Solar System Design or Schematic			<input type="checkbox"/>	
12b	A-4a	For PhotoVoltaic – Utility Interconnect Agreement	Contract Number? Signed ? Dated ?	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>	
13	A-4b	For Solar Thermal – SRCC Certification Form	Not Required for PV System		<input type="checkbox"/>	
14	A-5	Building Code Inspection Report, or Copy of Inspection tag	Required by Form 2 or Form 3		<input type="checkbox"/>	

## Form BCA

### Building Code Authority

This form, shown below, was designed to allow a local inspector to sign off for the inspection of a solar system. For a solar thermal system, the Mechanical Inspector, Authority Having Jurisdiction (AHJ) is to sign off on the form. For a photovoltaic system, the Electrical Inspector, Authority Having Jurisdiction (AHJ) is to sign off on the form.

The Building Code Authority could be the New Mexico Construction Industries Division, NMCID or the City Inspection Department, or the County Inspection Department. Only one inspection agency is to be

specified on this form. The permit number is the reference number for the permit. The date the permit was issued is desired, and the date that the system passed inspection is required. A name for the inspector along with his phone number is desired along with his required signature. Note that a printed inspection report from the building code authority can substitute for this signed form.

**Form BCA Residential Solar NMAC 3.3.14  
Solar System Installation Form- BCA**

New Solar Market Development Tax Credit Form BCA Version 072420A

For ECMD USE Only

<b>*Asterisk indicates required information</b>			
<b>NM Taxpayer Information</b>			
1*Name	_____	_____	Contact Info
	<small>First Name</small>	<small>MI</small>	<small>Last Name</small>
			<small>Phone Number with Area Code</small>
2 <b>*BUILDING CODE AUTHORITY (BCA)</b>			
<input type="checkbox"/> NMCID	<input type="checkbox"/> City _____	<input type="checkbox"/> County _____	
*Permit # _____			
Date permit issued _____		*Date when the final inspection was complete _____	
*AUTHORITY HAVING JURISDICTION SIGNATURE _____		*DATE _____	*AHJ PRINTED NAME _____
			PHONE NUMBER _____

**FORM TIP:** AT THE TOP OF FORM 1 ARE TWO BUTTONS: CLEAR ALL ENTRIES, CLEAR CLIENT ENTRIES  
THE CLEAR ALL ENTRIES BUTTON WILL CLEAR ALL THE FORM FIELDS ON ALL OF THE FORMS.  
THE CLEAR CLIENT ENTRIES BUTTON WILL CLEAR ALL THE FIELDS FOR A CLIENT BUT LEAVE THE CONTRACTOR FIELDS POPULATED. THIS IS A FEATURE FOR THE INSTALLERS.

# Form 1

## Application

This form collects information about who owns the solar system, and where the owner lives. The top of the Form 1 is shown below. The tax ID for the owner is collected, and information about the owner's tax situation is collected. The location of the system is identified along with who installed the system. Specific information about the solar system is collected and whether the tax credit is for a solar thermal system, a photovoltaic system, or a combined solar and photovoltaic system.

FORM 1 RESIDENTIAL SOLAR NMAC 3.3.14  
SOLAR SYSTEM CERTIFICATION APPLICATION  
New Solar Market Development Tax Credit Form 1 Version 072820

One of these checkboxes must be checked, otherwise the application will be rejected.

\*Asterisk indicates required information  
EIN numbers are accepted NM CRS numbers are not accepted Report only one Primary SSN unless you will file separately.

**NM Taxpayer Information CONFIDENTIAL** (when Social Security Number entered) 14\* Individual/Joint  Married, Filing Separately  Business/LLC/LLP

<b>1*</b>	Name	<input type="text"/> Title <input type="text"/> First Name <input type="text"/> MI <input type="text"/> Last Name	*SSN	<input type="text"/>
<b>2</b>	Name	<input type="text"/> Title <input type="text"/> First Name <input type="text"/> MI <input type="text"/> Last Name	SSN	<input type="text"/>
<b>3*</b>	Mailing Address	<input type="text"/> Street Number <input type="text"/> Street Name or HWY Number or PO Box # <input type="text"/> Town or City <input type="text"/> State	*ZIP (+4)	<input type="text"/>
<b>4*</b>	System Location	<input type="text"/> Street Number <input type="text"/> Street Name or HWY Number or PO Box # <input type="text"/> Town or City <input type="text"/> State <input type="text"/> County	*ZIP (+4)	<input type="text"/>
<b>5*</b>	Contact Info	<input type="text"/> Phone Number with Area Code <input type="text"/> Email Address	Other Contact	<input type="text"/> Phone Number with Area Code <input type="text"/> Email Address

**6 Applicant installed the system without a contractor. Check**

Using the Find Numbers (little numbers at start of the row) for the row information:

- 1) A required field. The applicants name is required along with a matching Social Security Number. When applying through the electronic portal, the SSN number is encrypted and is securely protected in the EMNRD database. When printing the form, and the SSN number has been entered, the printed copy will show a blank. This is to protect the number. The number would still be contained in the form.
- 2) For applications using 'Married, Filing Separately' checkbox, this line would be filled in along with the SSN number.
- 3) A required field. Where should the tax credit letter be mailed to? The Zip code is required. The Zip+4 is desired.
- 4) A required field. The system location could be the same as the mailing address, but please enter the address again with the county information and the Zip code information.
- 5) A required field, and the second most important one – the contact information is required so the EMNRD office can respond to questions or concerns with the application.
- 6) If the applicant installed the system without a contractor, this box must be checked.
- 14) Required field. One of the three check boxes **must** be selected.

The Clear All Entries button will clear all the form fields. The Clear Client Entries will leave the contractor information on the form fields.



**Form 1, Contractor and System Information.**

The middle page fields of Form 1, shown below, gather information about the contractor or installer and the solar system. Contractor city of operation and contact details are requested. Two contractors can be listed with the top being reserved for photovoltaic systems. Information is gathered about whether the solar system is a photovoltaic system or a solar thermal system and the basic size of the systems and where the system is located on the property. The bottom block requests the invoices and the receipts for the solar system and totals the invoices into the Total System Cost (basis) which becomes the initial figure upon which the tax credit is calculated.

6 Applicant installed the system without a contractor. Check <input type="checkbox"/>					
<b>Contractor(s) Information</b>					
7 *Contractor #1	Firm Name	Town or City	State	Contact Info	Phone Number with Area Code Email Address
			NM		
8 Contractor #2	Firm Name	Town or City	State	Contact Info	Phone Number with Area Code Email Address
			NM		
<b>Solar System Information (Specify 9 and/or 10)</b>					
9 <input type="checkbox"/> PV System Size in kW DC <input type="text"/> Inverter total AC kW <input type="text"/> Roof <input type="radio"/> Ground Mount: Rack <input type="radio"/> Pole <input type="radio"/> Tracking <input type="checkbox"/>					
<input type="radio"/> Off Grid <input type="radio"/> On Grid Utility <input type="text"/>					
10 <input type="checkbox"/> Solar Thermal System Number of Collectors <input type="text"/> Roof Top <input type="radio"/> Ground Mount <input type="radio"/> Hot Water <input type="checkbox"/> Space Heating <input type="checkbox"/>					
<b>11 Solar System Costs for NM Tax Credit</b>					
a. *Contractor #1 invoice	\$	<input type="text"/>			
b. Contractor #2 invoice	\$	<input type="text"/>			
c. Other Costs (w invoice)	\$	<input type="text"/>			
d. *Total System Cost (basis)	\$	<input type="text"/>	0		

Using the Find Numbers (little numbers at start of the row) for the row information:

- 6) This checkbox informs the reviewer that an applicant installed the system without a licensed contractor. A contractor could be employed by the applicant to connect a grid-tied PV system (code requirement) that the applicant installed. This sub-contractor invoice should be listed in block 11 as Other Costs.
- 7) A required field. Enter the contractor information and contact information.
- 8) A duplicate field for a second contractor or a solar thermal contractor when a solar thermal system is installed.
- 9) A required field. Check box to indicate that a PV system was installed.
  - a. PV system size in kW DC. This is the number of panels times the wattage of the panel divided by 1,000. Example = 20 modules X 350 Watts per module / 1000 = 7.0 kW
  - b. Inverter total AC kW. If the inverter is a single unit, then enter the nameplate capacity, i.e., a 7 kW inverter would be 7.0 kW. If there are microinverters used, then the AC kW would be the number of modules times the Watts of the inverters divided by 1000. Example = 20 modules X 295 Watt microinverter / 1000 = 5.9 kW.
  - c. Where are the modules mounted: on the roof checkbox, on the ground with a rack checkbox, or on a pole mount checkbox.
  - d. Are the modules mounted on a sun tracker? checkbox.
  - e. Is the system off-grid? checkbox. If the system is on grid? checkbox. Drop down and select the utility that the system is connected to. Note off-grid is a selection as is 'other'.

## Form 1, Contractor and System Information continued.

Using the Find Numbers (little numbers at start of the row) for the row information:

- 10) A required field. Check box to indicate that a solar thermal system was installed.
- a. Number of solar thermal collectors. 1 to 10 typically.
  - b. Where are these collectors mounted: on the roof checkbox, on a ground mount with a rack checkbox.
  - c. Does the solar thermal system used for domestic hot water checkbox or for space heating checkbox or check both.

### 11) Solar System Costs for NM Tax Credit

- a. Enter the amount of the contractor invoice
- b. Enter the amount of the second contractor invoice
- c. Enter the receipts or sub-contractor invoice amount here. If there are many receipts, the receipts should be taped to 8 ½ X 11 paper and photocopied. A list of the receipt amounts and a sum should be provided on an attached separate piece of paper. Please refer to the rules for the tax credit NMAC 3.3.14 to verify what costs are allowed.
- d. The Total of the above three entries is displayed automatically. This is the basis amount for the tax credit calculation.

## Form 1, Applicant Agreement.

The final part of the Form 1 Application is the Applicant Agreement. This is the agreement between the State of New Mexico and the applicant concerning the solar system that was installed and the requirements for tax credit eligibility. The applicant is encouraged to read the agreement and understand this agreement. The applicant makes a declaration of when the system became operational and signs the agreement and dates the agreement. A co-applicant can also sign and date the agreement.

<sup>12</sup> **Applicant Agreement**

The applicant named above and signing this statement agrees that all information provided in this application package is true and correct to the best of the applicant's knowledge. The applicant has read the certification requirements of 3.3.14 NMAC. The applicant understands that there are annual aggregate state tax credit limits in place for solar thermal systems and photovoltaic systems and that the department must certify the solar energy system documented in this application package before the applicant is eligible for a state tax credit. Furthermore, the applicant agrees to:

- a) make any changes the department requires to the solar energy system for compliance with 3.3.14 NMAC;
- b) operate the solar energy system for a minimum of five years after department certification or, if the residential, business, or agricultural enterprise where the solar energy system is located is sold or transferred to another party within five years after the department's certification of the solar energy system, the sale or transfer agreement shall require the solar energy system's continued operation or maintenance for energy production for no less than the balance of the five-year period remaining;
- c) provide for the solar energy system's regular maintenance for a minimum of five years with the applicant's own resources or through a contractor;
- d) and allow the division or its authorized representative to inspect the solar energy system that is described in the application package, from the application package's submittal to three years after the department has certified the solar energy system, upon the division providing a minimum of five days notice to the applicant.

Date System was placed in Operation \_\_\_\_\_


_____ APPLICANT'S SIGNATURE	_____ DATE	_____ APPLICANT'S SIGNATURE	_____ DATE
_____ * APPLICANT'S PRINTED NAME		_____ *APPLICANT'S PRINTED NAME	

The Date the System was placed in Operation will determine the tax year for the tax credit. This date is the day that the system started continuous operation. The signatures can be electronic signatures or pen and ink signatures. Blue ink is suggested as an ink color for paper forms to identify the original form.

## Form 2

### Solar PV System Installation Form

The top of Form 2, shown below, collects information about the photovoltaic solar system, and the contractor that installed the system. If you have used the electronic forms, much of the information provided on Form 1 will be copied over to Form 2. If you are using paper forms, then information on Form 1 is again entered on Form 2 in the spaces provided.



telephone: (505)476-3310

For ECMD USE Only

**Form 2 Residential Solar NMAC 3.3.14**  
**Solar PV System Installation Form**  
 New Solar Market Development Tax Credit Form 3 Version 072420

*Asterisk indicates required information					
NM Taxpayer Information					
1*	Name	<div style="display: flex; justify-content: space-between;"> <span>First Name</span> <span>MI</span> <span>Last Name</span> </div>	Contact Info	Phone Number with Area Code	
2*	System Location	<div style="display: flex; justify-content: space-between;"> <span>Street Number</span> <span>Street Name or HWY</span> <span>Town or City</span> <span>County</span> </div>	*ZIP(+ 4)		
Contractor Information					
3 *	Business	Firm Name	License Number	XXXXXX	License Class
				GB98, EE98, MM98	
*	Contractor Representative	Name	Street Address or PO Box	Town	Contact Info
				Phone Number with Area Code or Email	

Using the Find Numbers (little numbers at start of the row) for the row information:

- 1) **Contractor Information.** Required fields. The Business or Firm name is entered followed by the License Number(s) and then the License Class(es) – General Contractor GB98, Electrical Contractor EE98, or Mechanical Contractor MM98. Use commas to separate the information. The local contractor representative (for the case of a large firm operating in multiple towns) and his office location and contact information is required.

**Form 2, Solar PV System Installation Form continued.**

**Photovoltaic System List Information**

The middle page fields of Form 2, shown below, gather design information about the Photovoltaic system and some pricing data. This data is collected to provide information to New Mexico Legislators about the tax credit, information for the local utilities and regulators, and provides a data source for national reports on economic trends in the solar industry.

4 • Photovoltaic System List Information			
Module Tilt	_____ deg.	Azimuth Ang.	_____ deg. Module Mfr. _____
Inverter Size kW	_____	Inv. Mfr.	_____ Battery kW _____ kWhrs _____
*Solar System Costs Reference Contractor Invoice(s) _____			
a. *Module model number	_____	Quantity	_____ Unit list \$ _____
b. Battery model	_____	Quantity	_____ Unit list \$ _____
c. *Labor Costs	_____		\$ _____
d. *System Cost	_____		\$ _____

Using the Find Numbers (little numbers at start of the row) for the row information:

2) **Photovoltaic System List Information.** Required fields and desired fields.

**Module tilt.** The tilt angle is the angle from horizontal of the photovoltaic modules in the array. For a fixed array, the tilt angle is the angle from horizontal of the array where 0° = horizontal, and 90° = vertical. For arrays with one-axis tracking, the tilt angle is the angle from horizontal of the tracking axis. The tilt angle does not apply to arrays with two-axis tracking and should be set to zero (0). Typical range for tilt in New Mexico for PV systems would be from zero to 40 degrees. If there are multiple roof pitches where modules are placed, use the roof pitch with the most modules to indicate the tilt angle. Example: a system has ten modules and six of the modules are mounted on a 5 /12 pitch facing west. The 22.7 degrees would be entered into this field.

Roof Pitch	Tilt Angle	Roof Pitch	Tilt Angle	Roof Pitch	Tilt Angle
4/12	18.5	7/12	30.4	10/12	39.8
5/12	22.7	8/12	33.8	11/12	42.5
6/12	26.7	9/12	36.9	12/12	45.0

**Azimuth Angle.** For a fixed array, the azimuth angle is the angle clockwise from true north describing the direction that the array faces. An azimuth angle of 180° is for a south-facing array, and an azimuth angle of zero degrees is for a north-facing array. For an array with one-axis tracking, the azimuth angle is the angle clockwise from true north of the axis of rotation. The azimuth angle does not apply to arrays with two-axis tracking and a zero (0) should be entered into the field. Typical azimuth angles for New Mexico could be from 135 degrees to 225 degrees. For systems where there are multiple modules on different roof faces, use the roof face that has the most modules for the azimuth angle. For arrays where half of the modules face east and half of the modules face west, use the azimuth for the western face, in this case, 270 degrees.

**Module Mfr.** Enter the maker or manufacturer of the photovoltaic modules here.

**Form 2, Solar PV System Installation Form**  
**Photovoltaic System List Information continued.**

**Inverter Size kW.** Enter the capacity of the inverter. For a microinverter on a module, the size would be the Watts divided by 1000. Example: a 240 Watt micro-inverter would be 0.24 kW. For a single large inverter, enter the capacity of that inverter. A 7,000 Watt inverter would be entered as 7.0 kW. This field does *not* record the total capacity of a microinverter system, but the individual capacity of one micro-inverter.

**Inv. Mfr.** Enter the name of the inverter manufacturer or maker.

**Battery kW.** Enter the capacity of the storage system that is part of the photovoltaic system. Example: If there are three 400 Watt battery modules in the system, then the capacity number to enter is calculated as  $3 \times 400 / 1000 = 1.2$  kW. If the system uses a single battery system, then the capacity of that large system in kW would be entered. If the system uses individual cells, then the capacity in kW should be provided by the contractor or installer.

**(Battery) kWhrs.** Enter the energy capacity of the storage system in kilowatt hours. The installer or contractor should provide this information from the battery system vendor. An example is a 1 kW capacity storage system that can operate for 4 hours. This is a  $1 \times 4 = 4$  kWhr system.

**\*Solar System Costs**

**Reference Contractor Invoice(s).** Enter the tracking or accounting reference number for the contractor invoice(s) here (typically on the top of the invoice). Multiple entries can be separated by commas. This is not where the costs are entered.

a. \* **Module model number.** Enter the model number for the photovoltaic module.

Quantity. Enter the number of PV modules installed.

Unit List \$. Enter the published list price for the modules (not the discounted invoice price).

b. **Battery model number.** Enter the model number for the photovoltaic module.

Quantity. Enter the number of battery modules or cells installed.

Unit List \$. Enter the published list price for the battery modules or cells (not the discounted invoice price).

c. \* **Labor Costs.** Enter a reasonable estimate of the labor costs for this project.

d. \* **System Cost.** Enter the costs from the invoice(s) that reflect the cost of this solar system.

**Form 2, Solar PV System Installation Form continued.**

**Building Code Authority (BCA) block.**

The Building Code Authority could be the New Mexico Construction Industries Division, NMCID or the City Inspection Department, or the County Inspection Department. Only one inspection agency is to be specified on this form. The permit number is the reference number for the permit. The date the permit was issued is desired, and the date that the system passed inspection is required. Note that a printed inspection report from the building code authority is required if using this method to satisfy the inspection requirement. The inspection report would be attached to the supporting PDF file as attachment A-5. See the Form BCA for other options.

<b>5* BUILDING CODE AUTHORITY (BCA)</b>		Include inspection printout from BCA with application	
*Permit #	<input type="text"/>	NMCID <input type="checkbox"/>	City <input type="text"/> County <input type="text"/>
Date permit issued:	<input type="text"/>	* Date when the final inspection was complete:	<input type="text"/>
Applicant installed the system without a contractor and is signing as the contractor in the representation below. Check <input type="checkbox"/>			

**Contractor Representation block.**

The Contractor enters the date that the solar system was substantially complete and ready to operate. The contractor signs the Form 2 in this block to represent that the four statements a) through d) are true to the best of the contractor’s knowledge.

The checkbox for the Applicant Installed System above the Contractor Representation Block indicates that the applicant installed the system. The applicant would then sign the Contractor Representation.

Applicant installed the system without a contractor and is signing as the contractor in the representation below. Check <input type="checkbox"/>		
<b>6* *CONTRACTOR REPRESENTATION</b>		
The contractor named above agrees:		
a) That the solar energy system was installed in full compliance with all applicable federal, state, and local government laws, regulations, codes and standards that are in effect at the time of installation.		
b) The contractor has read the certification requirements of 3.3.14 NMAC.		
c) The installed solar energy system will work properly with regular maintenance.		
d) The contractor provided written operations and maintenance instructions to the above named taxpayer and posted a one-page summary of these instructions in a sheltered accessible location acceptable to the taxpayer and which is near or at the solar energy system’s array or balance of system components.		
Date when the solar system was complete and ready to operate: <input type="text"/>		
<input type="text"/>	<input type="text"/>	<input type="text"/>
*CONTRACTOR SIGNATURE	*DATE	*CONTRACTOR PRINTED NAME

## Form 3

### Solar Thermal System Installation Form

The top of Form 3, shown below, collects information about the solar thermal system, and the contractor that installed the system. If you have used the electronic forms, much of the information provided on Form 1 will be copied over to Form 3. If you are using paper forms, then information on Form 1 is again entered on Form 2 in the spaces provided.

#### Form 3 Residential Solar NMAC 3.3.14 Solar Thermal System Installation Form

New Solar Market Development Tax Credit Form 3 Version 072420

For ECMD USE Only

NM Taxpayer Information				*Asterisk indicates required information	
1* Name	First Name	MI	Last Name	Contact Info	Phone Number with Area Code
2* System Location	Street Number or HWY or Street Name	Town or City	County	*ZIP(+ 4)	
3* Contractor Information					
Business Name	Firm Name	* License Number	XXXXX	* License Class	GB98, EE98, MM98
4* Contractor Representative	Name	Street Address or PO Box	Town	Contact Info	Phone Number with Area Code or Email

Using the Find Numbers (little numbers at start of the row) for the row information:

- 3) **\*Contractor Information.** Required fields. The Business or Firm name is entered followed by the License Number(s) and then the License Class(es) – General Contractor GB98, Electrical Contractor EE98, or Mechanical Contractor MM98. Use commas to separate the information.
- 4) The local contractor representative (for the case of a large firm operating in multiple towns) and his office location and contact information is required.

**Form 3, Solar Thermal System Installation Form continued.**

**Solar Thermal List Information**

The middle page fields of Form 3, shown below, gather design information about the Solar Thermal system and some pricing data. This data is collected to provide information to New Mexico Legislators about the tax credit, information for the local utilities and regulators, and provides a data source for national reports on economic trends in the solar industry.

<sup>5</sup> * Solar Thermal List Information			
SRCC ID	Collector Tilt	deg.	Azimuth Ang.
			deg.
Collector Mfr.	Collector Aperture		in. X in.
Thermal Storage Fluid	Volume		
Freeze Protect:	Glycol	<input type="radio"/>	Controller <input type="radio"/>
			Drainback <input type="radio"/>
Overheat Protect:	TPR valve	<input type="radio"/>	Radiator <input type="radio"/>
			Dump <input type="radio"/>
<sup>6</sup> *Solar System Costs Reference Contractor Invoice(s)			
a.	*Collector model number	Quantity	unit list \$
b.	Storage tank model	Quantity	unit list \$
c.	*Labor Cost		\$
d.	*System Cost		\$

Using the Find Numbers (little numbers at start of the row) for the row information:

**5) Solar Thermal List Information. Required fields and desired fields.**

**SRCC ID.** The Solar Rating and Certification Corporation certifies collectors. The ICC-SRCC OG-100 ratings make it easy to compare collectors from various manufacturers on an equal basis.

**Collector tilt.** The tilt angle is the angle from horizontal of the collector. For a fixed module, the tilt angle is the angle from horizontal of the array where 0° = horizontal, and 90° = vertical. Typical range for tilt in New Mexico for solar thermal systems would be from zero to 90 degrees. If there are multiple roof pitches where collectors are placed, use the roof pitch with the most collectors to indicate the tilt angle. Example: a system has four collectors and three of the collectors are mounted on a 5 /12 pitch facing west. The 22.7 degrees would be entered into this field

**Azimuth Angle.** For a fixed collector, the azimuth angle is the angle clockwise from true north describing the direction that the collector faces. An azimuth angle of 180° is for a south-facing collector, and an azimuth angle of zero degrees is for a north-facing collector. Typical azimuth angles for New Mexico could be from 135 degrees to 225 degrees. For systems where there are multiple collectors on different roof faces, use the roof face that has the most collectors for the azimuth angle.

**Collector Mfr.** Enter the maker or manufacturer of the solar thermal collector.

**Collector Aperture.** Enter the height and width of the solar thermal collector in inches.

**Thermal Storage Fluid.** Enter the fluid type used with the collector to transfer the heat or in the system storage. Examples are Water, Glycol mix 50/50, Thermal transfer fluid, Oil.

**Volume.** Enter the amount (volume) of the thermal storage fluid in gallons.



**Form 3, Solar Thermal System Installation Form**  
**Solar Thermal List Information continued.**

Freeze Protect: Check one of the boxes that most correctly describes the freeze protection for the system: Glycol mix – antifreeze, Controller – active controller, and a specific design type – Drain back (this is not the drain down design).

Overheat Protect: Check one of the boxes that most correctly describes the overheat protection for the system: TPR – Temperature and Pressure Relief valve, Radiator – where the controller uses a pump to move excess heat energy to a radiator to cool the system, Dump where the controller uses a pump to move excess heat energy to a large thermal mass to absorb the excess heat energy.

6) **\*Solar System Costs**

Reference Contractor Invoice(s). Enter the tracking or accounting reference number for the contractor invoice(s) here (typically on the top of the invoice). Multiple entries can be separated by commas. This is not where the costs are entered.

a. \* Collector model number. Enter the model number for the solar thermal collector.

Quantity. Enter the number of solar thermal collectors installed.

Unit List \$. Enter the published list price for the collectors (not the discounted invoice price).

b. Storage tank model. Enter the model number for the thermal storage tank.

Quantity. Enter the number of storage tanks installed.

Unit List \$. Enter the published list price for the storage tank(s) (not the discounted invoice price).

c. \* Labor Costs. Enter a reasonable estimate of the labor costs for this project.

d. \* System Cost. Enter the costs from the invoice(s) that reflect the cost of this solar system.

**Building Code Authority (BCA) block.**

The Building Code Authority could be the New Mexico Construction Industries Division, NMCID or the City Inspection Department, or the County Inspection Department. Only one inspection agency is to be specified on this form. The permit number is the reference number for the permit. The date the permit was issued is desired, and the date that the system passed inspection is required. Note that a printed inspection report from the building code authority is required if using this method to satisfy the inspection requirement. The inspection report would be attached to the supporting PDF file as attachment A-5. See the Form BCA for other options.

<b>7* BUILDING CODE AUTHORITY (BCA)</b>		<b>Include inspection printout from BCA with application</b>	
*Permit #	<input type="text"/>	NMCID <input type="checkbox"/>	City <input type="text"/> County <input type="text" value="v"/>
Date permit issued	<input type="text"/>	*Date when the final inspection was complete	<input type="text"/>

**Form 3, Solar Thermal System Installation Form continued.**

**Contractor Representation Block.**

The Contractor enters the date that the solar system was substantially complete and ready to operate. The contractor signs the Form 3 in this block to represent that the four statements a) through d) are true to the best of the contractor's knowledge.

The checkbox (Find #8) for the 'Applicant Installed the System' above the Contractor Representation Block indicates that the applicant installed the system. The applicant would then sign the Contractor Representation.

8* Applicant installed the system without a contractor and is signing as the contractor in the representation below. Check <input type="checkbox"/>		
<b>9* CONTRACTOR REPRESENTATION</b>		
The contractor named above agrees:		
a) That the solar energy system was installed in full compliance with all applicable federal, state, and local government laws, regulations, codes and standards that are in effect at the time of installation.		
b) The contractor has read the certification requirements of 3.3.14 NMAC.		
c) The installed solar energy system will work properly with regular maintenance.		
d) The contractor provided written operations and maintenance instructions to the above named taxpayer and posted a one-page summary of these instructions in a sheltered accessible location acceptable to the taxpayer and which is near or at the solar energy system's array or balance of system components.		
Date when the solar system was complete and ready to operate: _____		
_____	_____	_____
*CONTRACTOR SIGNATURE	*DATE	*CONTRACTOR PRINTED NAME

## Form 4

### Taxpayer and Contractor Statement of Understanding (SOU)

The top of Form 4, shown below, identifies the applicant and the contractor for the solar system. The statement of understanding is a contract between the applicant and the contractor. If you have used the electronic forms, the information provided on Form 1 will be copied over to Form 4. If you are using paper forms, then information on Form 1 is again entered on Form 4 in the spaces provided.

#### Form 4 Residential Solar NMAC 3.3.14

#### Taxpayer and Contractor Statement of Understanding (SOU)

New Solar Market Development Tax Credit Form 4 Version 072420

For ECMD USE Only

1 Applicant	Name		Contact	Phone Number with Area Code
			Info	
2 Contractor	Firm Name		Contact	Phone Number with Area Code
			Info	

**<sup>3</sup>TAXPAYER AND CONTRACTOR STATEMENT OF UNDERSTANDING**

The final part of the Form 4, Statement of Understanding, is the Signature block. This is the agreement between the Contractor and the Applicant concerning the solar system that was installed and the requirements for tax credit eligibility under the tax credit rules. The applicant is encouraged to read the agreement and understand this agreement. A co-applicant can also sign and date the agreement.

**D. If the system is installed by a contractor, have a written minimum two year warranty provided by the contractor on parts, equipment and labor with the following exceptions;**

**(a) the warranty provided by the contractor on each specific piece of equipment shall not exceed the duration and conditions of the warranty provided by the manufacturer of the equipment against defects in materials and workmanship;**

**(b) in the case of an expansion of an existing system, the warranty provided by the contractor shall be limited to cover only parts, equipment and labor directly related to the upgrade or expansion; and**

_____ *Contractor's Signature	_____ *Date	_____ Contractor's Printed Name
_____ *Applicant's Signature	_____ *Date	_____ Applicant's Printed Name
_____ Applicant's Signature	_____ Date	_____ Applicant's Printed Name

## Form 5

### Business / LLC / LLP Form

Form 5 is shown below. Form 5 collects information about a business entity that owns the solar system, and who is the Authorized Representative of that business entity. The mailing address is entered along with a phone number. The tax ID for the business is required. The Authorized Representative signs this form.

When applying for the tax credit with the New Mexico Taxation and Revenue Department, the application NM T&R Form 41406 will request information about additional partners in the business enterprise. New Mexico Taxation and Revenue Department is the final authority on the use of this tax credit.

#### Form 5 Residential Solar NMAC 3.3.14

#### Business/LLC/LLP Form

New Solar Market Development Tax Credit Form 5 Version 072420

For ECMD USE Only

Contact Information				
1 LLC/LLP	Firm Name			*FEIN
2 Authorized Representative	Name			Contact Info Phone Number with Area Code
3* Mailing Address	Street Number and Street Name or HWY Number or PO Box #	Town or City	State	*ZIP (+ 4)
<b>Signature</b>				
*Authorized Representative Signature		*Date	Authorized Representative Printed Name	

## Section Three

### Notes on Software.

Notes for PDF Fillers as of August 6, 2020

### PDF Readers / Fillers for Solar Market Development PDF Forms

This is the list of software tested by ECMD ITO with the PDF forms. Some applications had online versions; others require a download. PDF fillers that did not have an unlimited free option were not tested.

### Download versions.

**Foxit Reader** – Works great with form.

<https://www.foxitsoftware.com/pdf-reader/view-print-pdf/>

**Adobe Reader DC** – Works great with form.

People need to clear the check marks to not install McAfee products if that is not their intention.

<https://get.adobe.com/reader/otherversions/>

### Online versions.

**PDF Escape** - Works well with form. This online version is a decent option for those who do not want software installation. This is a likely solution for Mac users.

<https://www.pdfescape.com/open/>

### Does not work with the SMDTC Forms PDF:

**PDF Pro** – Does not Work well with form. This online application does not show the drop down selections for the county fields. This is too bad because most of the other features worked well, and the resultant export/save was still a fillable form that could be uploaded.

**PFD Nitro** – Do not use with forms. Both versions of this application software, online or desktop install, do not produce a usable result.

**Microsoft Edge** plugin – Do not use with forms. Results were very mixed depending upon the date of the software version.

**Google's Chrome** native PDF plug-in. Do not use with forms.

Do not use any online or plugin application that insists on printing the form to affect a save with contents.

*Note: Software Names mentioned are used under fair use guidelines and do not imply support or promotion by the State of New Mexico.*