This is an amendment to 3.3.28 NMAC, Sections 1, 3, 6 through 14 and 16 through 20, effective 1/31/2008.

- 3.3.28.1 ISSUING AGENCY: Energy, Minerals and Natural Resources Department, Energy, Conservation and Management Division.

 [3.3.28.1 NMAC N, 7-1-06; A, 1-31-08]
- **3.3.28.3 STATUTORY AUTHORITY:** [These rules are] 3.3.28 NMAC is established under the authority of [the Laws of 2006, Chapter 93] NMSA 1978, Sections 7-2-18.14 and 9-1-5(E). [3.3.28.3 NMAC N, 7-1-06; A, 1-31-08]
- **3.3.28.6 OBJECTIVE:** [The] 3.3.28 NMAC's objective is to establish procedures for administering the certification program for the solar market development tax credit. [3.3.28.6 NMAC N, 7-1-06; A, 1-31-08]

3.3.28.7 DEFINITIONS:

- **A.** "Applicant" means a New Mexico taxpayer that has installed a solar energy system and that desires to have the department certify the solar energy system pursuant to 3.3.28 NMAC so that the taxpayer may receive a state tax credit.
- **B.** "Application package" means the application documents an applicant submits to the division for certification to receive a state tax credit.
 - **C.** "Array" means the collectors of a solar thermal system or the modules of a photovoltaic system.
 - **D.** "Balance of system" means portions of a solar energy system other than the array.
- **E.** "Building code authority" means the [construction industries division of the] New Mexico regulation and licensing department, construction industries division or the local government agency having jurisdiction for building, electrical and mechanical codes.
- **F.** "Certified" or "certification" means department approval of a solar energy system, which makes the taxpayer owning the system eligible for a state tax credit.
- **G.** "Collector" means the solar thermal system component that absorbs solar energy for conversion into heat.
- **H.** "Collector aperture" means the area of a solar thermal collector that absorbs solar energy for conversion into usable heat.
 - **I.** "Component" means a solar energy system's equipment and materials.
 - **J.** "Department" means the energy, minerals and natural resources department.
 - **K.** "Division" means the department's energy conservation and management division.
- **L.** "Energy system" means an engineered system that delivers solar energy to an end use by flow of fluid or electricity caused by energized components such as pumps, fans, inverters or controllers.
- **M.** "Federal tax credit" means an income tax credit the United States government issues to a taxpayer for a solar energy system that meets United States government requirements.
- **N.** "Homeowner" means a taxpayer that may obtain a permit limited to construction of single-family dwellings, private garages, carports, sheds, agricultural buildings and fences.
- **O.** "Innovative" means an alternative method or material that is not commercialized for use in a solar energy system.
- **P.** "Install" or "installation" means the direct work of placing a solar energy system into service to operate and produce energy at the expected level for a system of its size.
- **Q.** "Interconnection" means connection of a photovoltaic system [operated by] that an electric utility customer operates to that utility's distribution grid system.
- **R.** "Interconnection agreement" means an agreement allowing the applicant to interconnect a solar energy system of a specified type and size to a suitable electric transmission or distribution line.
- S. "Module" means the photovoltaic system component that absorbs sunlight for conversion into electricity.
- T. "New" means the condition of being recently manufactured and not used previously in any installation.
 - **U.** "Non-residential" means a business or agricultural enterprise.
- **V.** "OG" means operating guidelines <u>that</u> the solar rating and certification corporation [(SRCC)] has or will establish, including system performance or component characteristics the SRCC defines in its directory.

Operating guidelines shall be from the directory in effect on [the date 3.3.28 NMAC is adopted] July 1, 2006 and all successive revisions.

- **W.** "Photovoltaic system" means an energy system that collects or absorbs sunlight for conversion into electricity.
- **X.** "Portable" means not permanently connected to a residence, business or agricultural enterprise or connected to a mobile vehicle that is a part of a residence, business or agricultural enterprise.
 - Y. "Solar collector" means a solar thermal collector or photovoltaic module.
- **Z.** "Solar market development tax credit" means the personal income tax credit the state of New Mexico issues to a taxpayer for a solar energy system the department has certified.
 - **AA.** "Solar energy system" means a solar thermal system or photovoltaic system.
- **BB.** "Solar storage tank" means a tank provided as a component in a solar thermal system that is not heated by electricity or a heating fuel.
- **CC.** "Solar thermal system" means an energy system that collects or absorbs solar energy for conversion into heat for the purposes of space heating, space cooling or water heating.
 - **DD.** "SRCC" means the solar rating and certification corporation.
- **EE.** "Standard test conditions" means the environmental conditions under which a manufacturer tests a photovoltaic module for power output, which are a photovoltaic cell temperature of 25 degrees celsius and solar insolation of 1000 watts per square meter on the photovoltaic cell surface.
 - **FF.** "State tax credit" means the solar market development tax credit.
- **GG.** "Tax credits difference" means the federal tax credit subtracted from 30 percent of the net solar energy system cost.
 - HH. "Tax credits sum" means the sum of the state tax credit and the federal tax credit.
- II. "Taxpayer" means the owner of a solar energy system and the residence, business or agricultural enterprise where the solar energy system is located who applies for certification of an operating solar energy system in order to receive a state tax credit.

[3.3.28.7 NMAC - N, 7-1-06; A, 1-31-08]

3.3.28.8 GENERAL PROVISIONS:

- **A.** Only a New Mexico taxpayer having purchased and installed an operating solar energy system the department has certified is eligible for a state tax credit.
- **B.** A corporation shall not be eligible for certification of a solar energy system the corporation owns under 3.3.28 NMAC's requirements. A corporation may install a solar energy system that complies with 3.3.28 NMAC's requirements and sell the solar energy system in a residence, business or agricultural enterprise to a taxpayer. If by this sale the taxpayer becomes the full owner of both the solar energy system and the residence, business or agricultural enterprise, and complies with 3.3.28 NMAC's requirements, that taxpayer is eligible for certification of that solar energy system.
- **C.** A taxpayer owning a solar energy system the department certifies shall locate that system at the residence, business or agricultural enterprise that taxpayer owns. The <u>taxpayer may rent a</u> residence, business or agricultural enterprise <u>that</u> the taxpayer owns [may be rented] to another entity.
- **D.** The annual aggregate amounts of the state tax credit available to taxpayers owning certified solar energy systems is limited to \$2,000,000 for solar thermal systems and \$3,000,000 for photovoltaic systems per calendar year. When the \$2,000,000 limit for solar thermal systems or the \$3,000,000 limit for photovoltaic systems is reached based on the total of taxpayers certified, the department will no longer certify taxpayers, but will accept them for future consideration in the next year, except for the last taxable year when the state tax credit is in effect. The division shall keep a record of the order of receipt of all application packages.
- E. [The department shall publish an annual report on the state tax credit by March 15 of the calendar year following each taxable year in which solar energy systems are certified.
- **F.**] In the event of a discrepancy between a requirement of 3.3.28 NMAC and an existing New Mexico regulation and licensing department or New Mexico taxation and revenue department rule promulgated prior to 3.3.28 NMAC's adoption, the existing rule shall govern.

 [3.3.28.8 NMAC N, 7-1-06; A, 1-31-08]

3.3.28.9 APPLICATION:

A. To apply for a state tax credit an applicant shall submit an application package to the division. An applicant may obtain a state tax credit application form and system installation form from the division.

- **B.** An application package shall include a completed state tax credit application form and written attachments for a solar thermal system or photovoltaic system. The applicant shall submit the state tax credit application form and any attachments required at the same time as a complete application package. An applicant shall submit one application package for each solar energy system. All material submitted in the application package shall be capable of being provided on 8½-inch x 11-inch paper.
- C. An applicant shall submit an application package to the division no later than [January] February 15 of the calendar year immediately following the taxable year in which the taxpayer seeks the state tax credit [is sought] to assure time for certification to be applied to that taxable year. The division shall not accept application packages after [January] February 15 of the calendar year immediately following the last taxable year that the state tax credit is available. If in a given year the February 15 due date occurs on a day when the department is closed for business, the due date shall be the next day that the department is open for business.
- **D.** The application package shall meet 3.3.28 NMAC's requirements. If an application package fails to meet a requirement, the department shall disapprove the application.
 - **E.** The completed application form shall consist of the following information:
 - (1) the taxpayer's name, mailing address, telephone number and social security number;
- (2) the address where the solar energy system is located, if located at a residence, business or agricultural facility or, a location description if located at an agricultural enterprise;
 - (3) the solar energy system's type and description;
- (4) the date the solar energy system started continuous operation or that an upgrade to an existing system became operational, if applicable;
- (5) if a contractor installed the solar energy system, the contractor's name, address, telephone number, license category and license number;
 - (6) acknowledgement that the homeowner installed the solar energy system; if applicable;
- (7) the net cost of equipment, materials and labor of the solar energy system, excluding the expenses and income listed in 3.3.28 NMAC;
- (8) a statement <u>that the applicant</u> signed and dated [by the applicant], which may be a form of electronic signature <u>if</u> approved by the department, agreeing that:
- (a) all information provided in the application package is true and correct to the best of the applicant's knowledge;
 - (b) applicant has read the certification requirements contained in 3.3.28 NMAC;
- (c) applicant understands that there are annual aggregate state tax credit limits in place for solar thermal systems and photovoltaic systems;
- (d) applicant understands that the department must certify the solar energy system documented in the application package before becoming eligible for a state tax credit;
- (e) applicant agrees to make any changes the department requires to the solar energy system for compliance with 3.3.28 NMAC;
- **(f)** applicant agrees to 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;
- (g) applicant agrees to 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; and
- **(h)** applicant agrees to allow the division or its authorized representative to inspect the solar energy system that is described in the application package at any time 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, and;
 - (9) a project number the division assigns to the application.
- ${\bf F.}$ The application form shall request the following as optional information provided by the applicant:
 - (1) taxpayer's email address; and
 - (2) contractor's email address.
- **G.** The application form shall include optional selections where the applicant can indicate interest in allowing the department to take the following actions:
 - (1) adding energy monitoring equipment to the solar energy system;
 - (2) conducting an analysis of solar energy system operation and performance; or

- (3) conducting an analysis of taxpayer's utility bill records.
- **H.** The application package shall consist of the following information provided as attachments:
- (1) a copy of a current property tax bill to the taxpayer for the residence, business or agricultural enterprise where the solar energy system [$\frac{1}{5}$] is located;
 - (2) a copy of the invoice of itemized equipment and labor costs for the solar energy system;
- (3) a copy of the solar energy system's design schematic and technical specifications as described in 3.3.28 NMAC;
 - (4) a photographic record of the solar energy system after installation is completed;
 - (5) a completed system installation form;
- (6) [a copy of the written final inspection approval from the building code authority or, if inspection approval cannot be obtained, the applicant shall provide the necessary information on the system installation form in place of obtaining the inspection approval;
- - (a) manufacturer or supplier of system components and their model numbers;
 - **(b)** number of collectors;
 - (c) collector aperture dimensions;
 - (d) orientation of collectors by providing the azimuth angle from true south and tilt angle from

horizontal;

- (e) SRCC solar collector certification identification number or, if SRCC has not certified the collector and the application package is submitted $[\frac{1}{2}]$
- (i) before January 1, 2007 and collector has been manufactured regularly for a minimum of five years as of January 1, 2006, the manufacturer's collector specifications and a copy of the application for solar collector certification form submitted to the SRCC by the manufacturer or;
- (ii) on January 1, 2007 or later but before January 1, 2010, a copy of the application for solar collector certification form the manufacturer has submitted to the SRCC and report status of SRCC certification process;
 - **(f)** a description of the freeze protection;
 - (g) a description of overheating protection;
- **(h)** thermal storage fluid or material and its volume, if thermal storage is a part of the system and if the thermal storage does not have energy provided from a non-solar or non-renewable source; and
 - (i) manufacturer's specifications for collectors, if collectors are unglazed;
- [(8)] (7) if application is for a photovoltaic system, include with design schematic or as separate attachments:
 - (a) manufacturer or supplier of major system components and their model numbers;
 - **(b)** number of modules:
 - $\begin{tabular}{ll} \textbf{(c)} & module \ rated \ direct \ current \ power \ output \ in \ watts \ under \ manufacturer's \ standard \ test \end{tabular}$

conditions;

 (\mathbf{d}) collectors' orientation by providing the azimuth angle from true south and tilt angle from

horizontal;

- (e) inverter capacity in kilowatts, if an inverter is a part of the system;
- (f) battery storage capacity in kilowatt-hours, if battery storage is a part of the system; and
- (g) a copy of the signature and specifications pages of the fully executed interconnection agreement with the electric utility if the photovoltaic system is interconnected to a utility transmission line or distribution system; and
 - [9] other information the department needs to evaluate the specific system type for certification.
 - **I.** The completed system installation form shall include the following information:
 - (1) printed name of the taxpayer who is identified on the application form,
- (2) printed name, title and telephone number of the contractor's authorized representative, if applicable, who approves the system installation form;
- (3) printed name, title and telephone number of the building code authority's authorized representative, if applicable, who approves the system installation form;
 - (4) date on which solar energy system installation was complete and ready to operate;
- (5) if a contractor installed the solar energy system, a statement [signed and dated by] that the contractor's authorized representative has signed and dated, which may be a form of electronic signature if approved by the department, agreeing that:

- (a) the solar energy system was installed in full compliance with all applicable federal, state and local government [laws] statutes or ordinances, rules or regulations and codes and standards that are in effect at the time of installation:
 - **(b)** contractor has read 3.3.28 NMAC's certification requirements;
 - (c) the date on which the solar energy system was ready to operate;
 - (d) the installed solar energy system will work properly with regular maintenance; and
- (e) contractor provided written operations and maintenance instructions to the applicant 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; [and]
- (6) a statement [signed and dated by] that the building code authority's authorized representative has signed and dated, which may be a form of electronic signature if approved by the department, that the solar energy system was installed in full compliance with all applicable codes [or, if inspection approval by the building code authority cannot be obtained, the applicant shall provide an alternative system approval, which is a statement signed and dated by the contractor, if contractor installed, or the homeowner, if homeowner installed, agreeing that
- (a) the contractor or homeowner asked the building code authority to conduct a final inspection of the solar energy system;
 - (b) written final inspection approval from the building code authority was not obtained;
 - (c) the building code authority did not reject the inspection approval;
- (d) 30 days or more have elapsed since the contractor or homeowner asked the building code authority to conduct a final inspection; and
- (e) the installed system is operating as designed and presented in the application package.]: and

 (7) if the applicant is unable to obtain a signed and dated statement from the building code authority's authorized representative on the system installation form, then the applicant may provide one of the following instead:
- (a) a photograph or copy of the permit tag clearly identifying the building code authority's authorized representative's signature, the date and the permit number;
 - (b) an official document from the building code authority that includes the:
 - (i) agency's name;
 - (ii) authorized representative's name, title, telephone number and signature;
 - (iii) date of authorized representative's signature; and
 - (iv) permit number; or
 - (c) a web-based application the building code authority approves.
- **J.** The division shall return an incomplete application to the applicant. [3.3.28.9 NMAC N, 7-1-06; A, 1-31-08]

3.3.28.10 APPLICATION REVIEW PROCESS:

- **A.** The department shall consider applications in the order received, according to the day they are received, but not the time of day. The department gives applications received on the same day [shall receive] equal consideration. If the department approves applications received on the same day and the applications would exceed the overall limit of state tax credit availability, then the department [shall divide] divides the available state tax credit among those applications on a prorated, net solar energy system cost basis.
- [B. The department shall approve or disapprove an application package within 30 days following the application package's receipt or, if more time is required, the division shall notify the applicant of the reason and shall approve or disapprove the application within 30 days of the applicant providing additional information.]
- [C-] B. The division [shall review] reviews the application package to calculate the state tax credit, [eheck] checks accuracy of the applicant's documentation and [determine] determines whether the department certifies the solar energy system.
- [D-] C. If the division finds that the application package meets 3.3.28 NMAC's requirements and a state tax credit is available, the department [shall certify] certifies the applicant's solar energy system and [document] documents the taxpayer as eligible for a state tax credit. If a state tax credit is not available in the taxable year of certification of the solar energy system submitted in the application package, the division [shall place] places the taxpayer on a waiting list for inclusion in the following taxable year, if a state tax credit remains available. The department [shall provide] provides approval through written notification to the applicant [within 15 days of the solar energy system's certification]. The notification shall include the taxpayer's contact information, social security number, system certification number, net solar energy system cost eligible for the state tax credit, the state tax credit amount and waiting list status, if applicable.

- [E.] <u>D.</u> The division [shall report] reports to the taxation and revenue department the information required to verify, process, and distribute each state tax credit by providing a copy of the department's approval notification [within 15 days of certifying the solar energy system].
- [F.] E. The applicant may submit a revised application package to the division. The division shall place the resubmitted application in the review schedule as if it were a new application.
- [G-] <u>F.</u> The department [shall disapprove] <u>disapproves</u> an application that is not complete or correct or does not meet the approval criteria. The department's disapproval letter shall state the reasons why the department disapproved the application. The applicant may resubmit the application package for the disapproved project. The division [shall place] <u>places</u> the resubmitted application in the review schedule as if it were a new application. [3.3.28.10 NMAC N, 7-1-06; A, 1-31-08]

3.3.28.11 SAFETY, CODES AND STANDARDS:

- **A.** Solar energy systems that the department may certify shall meet the following requirements:
- (1) compliance with the latest adopted version of all applicable federal, state and local government [laws] statutes or ordinances, rules or regulations and codes and standards that are in effect at the time [of application package submittal] that the applicant submits the application package;
- (2) compliance with all applicable utility company or heating fuel vendor requirements, if the system being served with a solar energy system is also served by utility electricity or a heating fuel;
- (3) compliance with the building code authority's structural design requirements, as applicable to new and existing structures upon which solar energy system components may be mounted and support structures of solar energy system components;
- (4) permitted and inspected by the building code authority for building, electrical or mechanical code compliance, as applicable to the type of solar energy system installed; and
- (5) a written final inspection approval obtained from the building code authority after the solar energy system's installation, as applicable to the solar energy system type, or alternative system approval as allowed by 3.3.28 NMAC.
- **B.** The department may certify a solar energy system [installed by] that a taxpayer who is also the homeowner of the residence at which the solar energy system is located has installed and shall not certify a solar energy system that the owner of a non-residential facility has installed.
 - C. Solar thermal systems that the department may certify shall meet the following requirements:
 - (1) if installed at a residence by a
- (a) contractor, installation by a certified mechanical journeyman who is an employee of a company holding a valid New Mexico mechanical contractor license provided, however, that an apprentice may work under a validly certified journeyman's direct supervision;
- **(b)** homeowner, installation by that homeowner who has met all the building code authority's requirements for obtaining a homeowner's permit, including passing a written examination for plumbing work the building code authority administers;
- (2) if installed at a non-residential facility, installation by a certified mechanical journeyman who is an employee of a company holding a New Mexico mechanical contractor license provided, however, that an apprentice may work under a validly certified journeyman's direct supervision; and
- (3) design, permitting and installation in full compliance with all applicable provisions of the New Mexico Plumbing Code (14.8.2 NMAC), the New Mexico Mechanical Codes (14.9.2 5 NMAC), the New Mexico General Construction Building Codes (14.7.2 8 NMAC) and any amendments to these codes adopted by a political subdivision that has validly exercised its planning and permitting authority under NMSA 1978, Sections [3.17.6 and 3.18.6] 3-17-6 and 3-18-6.
 - **D.** Photovoltaic systems that the department may certify shall meet the following requirements:
 - (1) if installed at a residence by a:
- (a) contractor, installation by a certified electrical journeyman who is an employee of a company holding a valid New Mexico electrical contractor license provided, however, that an apprentice may work under a validly certified journeyman's direct supervision; or
- **(b)** homeowner, installation by that homeowner who has met all the building code authority's requirements for obtaining a homeowner's permit, including passing a written examination for electrical work the building code authority administers;
- (2) if installed at a non-residential facility, installation by a certified electrical journeyman who is an employee of a company holding a New Mexico electrical contractor license provided, however, that an apprentice may work under a validly certified journeyman's direct supervision; and

(3) design, permitting and installation in full compliance with all applicable provisions of the New Mexico Electrical Code (14.10.4 NMAC) and any amendments to these codes adopted by a political subdivision that has validly exercised its planning and permitting authority under NMSA 1978, Sections [3.17.6 and 3.18.6] 3-17-6 and 3-18-6.

[3.3.28.11 NMAC - N, 7-1-06; A, 1-31-08]

3.3.28.12 SOLAR COLLECTOR AND MODULE ORIENTATION AND SUN EXPOSURE:

- A. A solar energy system array the department certifies shall have an azimuth angle or sun exposure reduction due to shading or other factors that results in annual energy production of the total solar energy system having a combined derating of not more than 25 percent when compared to an ideal solar energy system at the same location that has an unshaded array tilt equal to local latitude and azimuth of true south. For cases in which the combined impact of orientation and sun exposure of an array is evaluated, the applicant shall estimate a derating using a department approved method or model.
- **B.** A taxpayer operating a solar energy system the department certifies shall take the following actions to control reduced energy production:
 - (1) maintain vegetation affecting shading of an array; and
- (2) as much as practicable, monitor construction developments affecting shading of an array from adjacent structures and preserve sun exposure by complying with the Solar Rights Act's (NMSA 1978, Section 47-3-1 to 47-3-5 [NMSA 1978]) requirements.
- **C.** A tracking array of a solar energy system that the department certifies shall have a mechanism to track the sun so that the array absorber surface consistently receives the sun's direct beam at all times when the direct beam of full sun is available, without requiring manual adjustment, except for a solar energy system having the following tracking array control features:
- (1) automatic and intentional stowage of the array due to high velocity wind to avoid damage to the array and its support structure;
- (2) automatic and intentional adjustment to off-direct-beam array orientations at low sun angles to optimize the solar energy system's annual energy production; or
- (3) other automatic and intentional array control features that demonstrate to the department's satisfaction that the solar energy system's annual energy production is optimized.
- **D**. A solar energy system that the department certifies shall have an array and balance of system components that are automatically controlled to collect sunlight or solar heat and deliver to an end use, without requiring manual operation.
- **E.** It is the applicant's sole responsibility to take action or meet the Solar Rights Act's requirements, if applicable.

[3.3.28.12 NMAC - N, 7-1-06; A, 1-31-08]

3.3.28.13 MINIMUM SYSTEM SIZES, SYSTEM APPLICATIONS AND LISTS OF ELIGIBLE COMPONENTS:

- **A.** Solar energy systems or their portions that the department may certify shall meet the following requirements:
 - (1) be made of new equipment, components and materials;
- (2) if installed by a contractor, have a written minimum one-year warranty provided by the contractor on parts, equipment and labor;
- (3) be a complete energy system that collects, converts and distributes solar energy to the residence, business or agricultural enterprise it serves, unless requirements are met for expansion of an existing solar energy system or replacement of an existing solar energy system's components;
- (4) if an expansion of an existing solar energy system, end use annual energy production of the new system shall be increased in comparison to the existing system by the amount of the minimum system size requirement and the contractor or homeowner shall provide a written summary of the condition of each major component of the system;
- (5) if replacement of one or more components of an existing system, end use annual energy production of the new system shall be increased in comparison to the system's operation under existing conditions and the contractor or homeowner shall provide a written summary of the condition of each of the system's major components; and
- (6) if a specialty or retrofit component is required for a complete solar energy system, then that component shall be included as part of the solar energy system that is eligible for department certification.

- **B.** Solar energy systems or their portions that the department shall not certify are as follows:
- (1) a system or portion of a system that uses non-solar or non-renewable sources in its operation, with the exception of the following:
- (a) power necessary to provide for solar energy system components' incidental electricity needs; and
- **(b)** non-solar or non-renewable sources that do not exceed 25 percent of the system's annual energy production;
 - (2) a system or portion of a system that would be present if the solar energy system was not installed;
- (3) a system that increases an existing residence, business or agricultural enterprise's average annual energy consumption;
- (4) a system that is mobile and does not serve a permanent end use energy load or is not permanently located in New Mexico;
- (5) a system that is not connected to a structure or foundation and does not serve a permanent end use energy load or is not permanently located in New Mexico;
- (6) a system or portion of a system having one or more components not manufactured on a regular basis by a business enterprise;
 - (7) a system installed on a recreational vehicle;
 - (8) a system not serving an end use energy load; or
- (9) a system or portion of a system that replaces a system or portion of a system the department has certified in a previous application for a state tax credit.
- c. The department shall maintain lists of components eligible to be included as a net solar energy system cost. The lists shall be comprised of solar energy system components the department has certified, which the division shall compile on a continuing basis through the certification program. The division may refer to existing lists of components from other independent listing or certification organizations to evaluate inclusion of components on a department list. The division may remove a previously-listed component without notice if the component is not manufactured, does not comply with a code requirement, does not comply with a requirement of 3.3.28 NMAC, provides poor operational or energy performance or other reasons supported by division evaluation. The lists of components shall include the following information, if applicable:
 - (1) component category;
 - (2) component name or type;
 - (3) component model number;
 - (4) the manufacturer's name, mailing address, telephone number and email address;
 - (5) capacity, size or other descriptor of the component;
- (6) the published operational or energy performance data of the component provided by an independent listing or certification organization or, if not available, the manufacturer;
 - (7) date added to list; and
 - (8) other information necessary to describe the component.
- **D.** The department may disapprove a system type, solar thermal collector type, photovoltaic module type or a solar energy system component if not listed in 3.3.28 NMAC for certification or may deem it innovative, if the applicant requests in the application package.
 - **E.** Solar thermal systems that the department may certify include:
- (1) the system applications of solar domestic hot water, solar space heating, solar air heating, solar process heating, solar space cooling or combinations of solar thermal system applications listed in 3.3.28 NMAC;
 - (2) the collector types of flat plate, parabolic trough and evacuated tube; and
- (3) the listed component categories of collectors, pumps, fans, solar storage tanks, expansion tanks, valves, controllers and heat exchangers.
- **F.** A solar thermal system component that the department may certify is a photovoltaic system providing power for a solar thermal system component's incidental electricity needs. The department shall not certify such a photovoltaic system as a separate solar energy system eligible for a separate state tax credit.
 - **G.** Solar thermal systems or their components that the department shall not certify are as follows:
 - (1) a heating system or heating system components necessary for a swimming pool or a hot tub;
- (2) equipment sheds, wall preparation, cabinetry, site-built enclosures, distribution piping and associated installation costs;
- (3) a building design element used for passive solar space heating, space cooling, daylighting or other environmental comfort attribute;
 - (4) a water quality distillation or processing system;

- (5) in a combined system, the portions of the system not allowed to receive a state tax credit or for which the department shall not certify the system;
 - (6) systems without adequate freeze protection;
 - (7) systems incorporating drain down as a freeze protection method; and
 - (8) systems without adequate overheating protection.
 - **H.** Solar thermal systems that the department may certify shall meet the following requirements:
 - (1) minimum system size of [15.0] 15 square feet of solar collector aperture area;
- (2) for solar domestic hot water systems installed at a residence or business, a minimum of 50 percent of the total domestic water heating load provided by solar energy;
 - (3) a collector that is:
- (a) listed as certified by the SRCC by OG-100 collector certification or OG-300 system certification processes or, if collector is not certified by the SRCC and application package is submitted
- [(i) before January 1, 2007, manufactured regularly for a minimum of five years as of January 1, 2006 and submitted by the manufacturer to the SRCC for testing and certification; or

 (ii) on January 1, 2007 or later but before January 1, 2010, submitted by the
- manufacturer to the SRCC for certification and is active in the SRCC certification process;
- **(b)** if glazed, made of all-metal enclosures, absorber plates, fasteners and fittings; aperture glazing of tempered glass; and fiberglass or polyisocyanurate insulation; or
- (c) if unglazed, made of durable materials having a minimum 12 year warranty period for full replacement; and
- (4) all components approved by an agency accredited by the American national standards institute, if available for that specific component category.
 - **I.** Photovoltaic systems that the department may certify include:
- (1) the system applications of direct power without battery storage, utility grid interconnected without battery storage, utility grid interconnected with battery storage, stand-alone with battery storage, stand-alone with utility backup capability and water pumping;
 - (2) the flat plate module types of crystalline, poly-crystalline or thin-film amorphous silicon;
- (3) the listed component categories of modules, inverters, batteries, manufactured battery enclosures, charge controllers, power point trackers, well pumps, racks, sun tracking mechanisms, performance monitoring equipment, communications, datalogging or lightning protection; and
- (4) disconnect components, safety components, standard electrical materials and standard electrical hardware necessary for the assembly of the listed component categories into a complete, safe and fully operational system.
 - **J.** Photovoltaic systems that the department may certify shall meet the following requirements:
- (1) a minimum total array power output of [100.0] 100 watts direct current at manufacturer's standard test conditions; and
- (2) all components listed and labeled by a nationally recognized testing laboratory, if such listing is available for that specific component category.
 - **K.** Photovoltaic systems or their portions that the department shall not certify are as follows:
- (1) a commercial or industrial photovoltaic system other than an agricultural photovoltaic system on a farm or ranch that is not connected to an electric utility transmission or distribution system;
- (2) power equipment sheds, wall preparation, cabinetry, site-built battery enclosures, distribution wiring and associated installation costs;
- (3) the drilling, well casing, storage tanks, distribution piping, distribution controls and associated installation costs of a water pumping system; and
- (4) a packaged product powered by photovoltaic cells that a taxpayer purchased directly from a retail business enterprise, is not custom designed, and does not require a permit from the building code authority for installation, including [but not limited to] watches, calculators, walkway lights and toys.

 [3.3.28.13 NMAC N, 7-1-06; A, 1-31-08]

3.3.28.14 INNOVATIVE SOLAR ENERGY SYSTEMS:

- **A.** The department may certify an innovative solar energy system.
- **B.** A taxpayer shall request that the department review an application package as an innovative solar energy system.
- **C.** The division shall conduct a design review of a solar energy system when the taxpayer has requested innovative status.

- **D.** The department may determine that a solar energy system is innovative if
- (1) it does not include a system application, component, packaged system, solar thermal collector type or photovoltaic module type that the department may certify; and
 - (2) the division approves the design.
- **E.** Design approval by the division does not indicate department approval of actual system operation, energy production or code compliance.
- **F.** The application package of an innovative solar energy system shall include attachments in addition to those required in other sections of 3.3.28 NMAC that fully describe the solar energy system, as follows:
 - (1) a request for innovative status and a description of the innovative feature;
- (2) a design schematic detail of each system application, component, packaged system, solar thermal collector type or photovoltaic module type that makes the solar energy system innovative;
 - (3) a description of system operation; and
 - (4) an energy analysis of the solar energy system, including an estimate of annual energy production.
- G. [The department shall approve or disapprove an application package where the taxpayer has requested innovative status within 60 days following receipt of the application package.
- H.] Innovative solar energy systems that the department may certify shall meet all requirements of 3.3.28 NMAC, with the exception of the specific system application, component, packaged system, solar thermal collector type or photovoltaic module type that is to be installed.
- [4.] H. The department may approve an innovative component or system for inclusion on the department's list of certified components, if that component or system has been tested, certified, approved or listed by the applicable organization for the specific type of component or system and if such testing, certification, approval or listing is available. Upon the department listing a component or system as certified, subsequent applicants are not required to submit that component or system as an innovative system.

 [3.3.28.14 NMAC N, 7-1-06; A, 1-31-08]

3.3.28.16 CALCULATING THE SOLAR ENERGY SYSTEM COST:

- **A.** A state tax credit shall be based on the equipment, materials and labor costs of a solar energy system the department has certified.
- **B.** The equipment, materials and labor costs of a solar energy system the department certifies shall be documented in writing.
- **C.** The cost of a solar energy system the department certifies shall be the net cost of acquiring the system and shall not include the following:
 - (1) expenses, including but not limited to:
 - (a) unpaid labor or the applicant's labor;
 - (b) unpaid equipment or materials;
 - (c) land costs or property taxes:
- (d) costs of structural, surface protection and other functions in building elements that would be included in building construction if a solar energy system were not installed;
 - (e) mortgage, lease or rental costs of the residence, business or agricultural enterprise;
 - (f) legal and court costs;
 - (g) research fees or patent search fees;
 - (h) fees for use permits or variances;
 - (i) membership fees;
 - (j) financing costs or loan interest;
 - (k) marketing, promotional or advertising costs;
 - (I) repair, operating, or maintenance costs;
 - (m) extended warranty costs; [and]
 - (n) system resale costs;
 - (o) system visual barrier costs;
 - (p) adjacent structure modification costs; and
 - (q) vegetation maintenance costs;
 - (2) income, including [but not limited to]:
- (a) payments the solar energy system contractor or other parties provide that reduce the system cost, including rebates, discounts and refunds with the exception of federal, state and local government and utility company solar incentives;

- **(b)** services, benefits or material goods the solar energy system contractor or other parties provide by the same or separate contract, whether written or verbal; and
 - (c) other financial incentives provided for solar energy system installation, if applicable.
- [E-] <u>D.</u> The division shall make the final determination of the net cost of a solar energy system the department certifies pursuant to 3.3.28 NMAC.

[3.3.28.16 NMAC - N, 7-1-06; A, 1-31-08]

3.3.28.17 CALCULATING THE STATE TAX CREDIT:

- **A.** A state tax credit to a taxpayer for a solar energy system the department has certified shall not exceed:
 - (1) 30 percent of the net solar energy system cost; and
 - **(2)** \$9000.
- **B.** The total sum of the state tax credit and the federal tax credit shall not exceed 30 percent of the net solar energy system cost.
- **C.** If a taxpayer is eligible for a federal tax credit, the amount of the federal tax credit, whether claimed or unclaimed, shall be deducted from 30 percent of the net solar energy system cost.
- **D.** If the department certifies a solar energy system owned by a taxpayer who is not eligible for a federal tax credit, the federal tax credit shall not be deducted from 30 percent of the net solar energy system cost.
- **E.** A taxpayer may receive both a state tax credit and a federal tax credit if the taxpayer is eligible for each tax credit and the state tax credit amount is greater than the federal tax credit amount.
- **F.** The department shall disapprove an application package if the taxpayer is eligible for a federal tax credit and the federal tax credit amount that the taxpayer may claim is equal to or greater than the state tax credit.
 - **G.** If a taxpayer is eligible for a federal tax credit, the state tax credit shall be calculated as follows:
 - (1) calculate 30 percent of the net solar energy system cost;
- (2) calculate the tax credits difference by subtracting the federal tax credit from 30 percent of the net solar energy system cost;
 - (3) if calculation of the tax credits difference is:
 - (a) equal to or greater than \$9000, then the state tax credit is \$9000; [or]
 - (b) less than \$9000 and greater than \$0, then the state tax credit is the tax credits difference; or
 - (c) if less than or equal to \$0, then the state tax credit is \$0;
 - (4) using the state tax credit of the previous calculation, calculate the tax credits sum; and
 - (5) make final determination of state tax credit as follows:
- (a) if the tax credits sum is equal to or less than 30 percent of the net solar energy system cost, then the state tax credit remains as last calculated; or
- **(b)** if the tax credits sum is greater than 30 percent of the net solar energy system cost, then the state tax credit is adjusted to an amount at which the tax credits sum equals 30 percent of the net solar energy system cost:
- **H.** If a taxpayer is not eligible for a federal tax credit, the state tax credit shall be calculated as follows:
 - (1) calculate 30 percent of the net solar energy system cost;
 - (2) if the result of the previous calculation is
 - (a) equal to or greater than \$9000, then the state tax credit is \$9000; or
 - (b) less than \$9000, then the state tax credit is 30 percent of the net solar energy system cost.
- **I.** The department shall make the final determination of the federal tax credit amount that a taxpayer may claim for purposes of calculating a state tax credit pursuant to 3.3.28 NMAC.
- **J.** The taxation and revenue department shall make the final determination of the amount of a state tax credit.

[3.3.28.17 NMAC - N, 7-1-06; A, 1-31-08]

3.3.28.18 CLAIMING THE STATE TAX CREDIT:

- **A.** To claim the state tax credit, a taxpayer owning a solar energy system that the department has certified shall submit to the taxation and revenue department a claim, which shall consist of the notification the department issued to the taxpayer, a completed claim form the taxation and revenue department has approved and any other information the taxation and revenue department requires.
- **B.** If the amount of state tax credit claimed exceeds the taxpayer's individual income tax liability, the taxpayer may carry the excess forward for up to [ten] 10 consecutive taxable years.

- **C.** A taxpayer who has both a carryover state tax credit and a new state tax credit derived from a certified solar energy system in the taxable year for which the return is being filed shall first apply the amount of carryover state tax credit against the income tax liability. If the amount of liability exceeds the carryover state tax credit, then the taxpayer may apply the current year credit against the liability.
- **D.** A taxpayer claiming a state tax credit shall not claim a state tax credit pursuant to another law for costs related to the same solar energy system costs. [3.3.28.18 NMAC N, 7-1-06; A, 1-31-08]

3.3.28.19 CONSUMER INFORMATION:

- **A.** If a contractor installs the solar energy system, the contractor shall inform the taxpayer about system design, installation, performance, operation and maintenance by providing the following:
- (1) prior to system installation, a summary of the specific system type that meets all 3.3.28 NMAC's requirements, the system's capacity or size, and the system's estimated annual energy production;
- (2) upon completion of system installation, written operation and maintenance instructions, including how to conduct simple diagnostic observations and tests to determine if the solar energy system is working properly to produce energy;
- (3) upon completion of system installation, a written summary of operation and maintenance instructions on one page, posted at a sheltered accessible location acceptable to the taxpayer and [which] that is near or at the solar energy system's array or balance of system components; and
- (4) upon completion of system installation, written warranties in effect for equipment and contractor's labor, including their start and end dates and telephone, address and website contact information, as applicable, for honoring or extending warranties.
 - **B.** If the solar energy system is a solar thermal system, the following information shall be displayed:
 - (1) pump or fan status by a visual indicator, as applicable;
 - (2) outlet temperature of the collector loop;
 - (3) if a liquid collector, the collector loop's pressure; and
 - (4) the solar storage tank's temperature, if applicable.
 - **C.** If the solar energy system is a photovoltaic system, the following information shall be displayed:
 - (1) for all photovoltaic systems, a visual indicator for operating status;
 - (2) for an electric utility interconnected system without batteries
 - (a) daily and cumulative energy production in kilowatt-hours alternating current of the inverter

output; and

- (b) instantaneous power output in kilowatts alternating current of the inverter output;
- (3) for an electric utility interconnected system with batteries, a method to enable real-time evaluation of system power or energy production; and
 - (4) for a stand-alone system with battery storage
 - (a) voltage and amperes of module array; and
 - **(b)** battery storage level.

[3.3.28.19 NMAC - N, 7-1-06; A, 1-31-08]

3.3.28.20 INSPECTION OF SOLAR ENERGY SYSTEMS:

- **A.** The inspections required through the application process for certification of a taxpayer's solar energy system are:
- (1) inspection by the building code authority for building, electrical or mechanical code compliance, as applicable to the solar energy system type; and
- (2) inspection for compliance with electric utility company requirements for photovoltaic systems that are interconnected to the distribution grid of that electric utility company, if applicable.
- **B.** For purposes of monitoring solar energy systems' operation, energy production and maintenance that the department has certified, the division or its authorized representative shall have the right to inspect a solar energy system a taxpayer owns and the department has certified, within three years after the department's certification, upon the division providing a minimum of five days notice to the taxpayer. If the division determines by inspection or review of system operation documentation that a solar energy system the department has previously certified does not meet 3.3.28 NMAC's requirements, the following process shall be followed:
- (1) the department shall provide written notification to the taxpayer owning the solar energy system within 15 days of the decertification determination with recommendations for corrective action;

- (2) within 30 days of taxpayer's receipt of the department's notification, the taxpayer shall provide the department with a written description of corrective action taken or justification that the solar energy system meets 3.3.28 NMAC's requirements;
- (3) within 30 days of department's receipt of taxpayer's corrective action or justification description, the department shall approve or disapprove the corrective action or justification and provide written notification to the taxpayer; and
- (4) if the department approves the taxpayer's corrective action or justification, the department shall provide written notification of approval to the taxpayer or, if the taxpayer's corrective action or justification is disapproved or the taxpayer takes no action in response to the original decertification determination, the department shall provide written notification to the taxation and revenue department and a copy to the taxpayer that
 - (a) the taxpayer's solar energy system is no longer certified;
 - (b) the taxpayer is not eligible for the state tax credit of the decertified system;
- (c) the taxpayer is not eligible for certification of future solar energy systems and the associated state tax credits; and
- (d) the department may recertify the taxpayer's solar energy system [may be recertified by providing] if the taxpayer provides a written description of corrective action taken or justification that the solar energy system meets 3.3.28 NMAC's requirements, if applicable.

 [3.3.28.20 NMAC N, 7-1-06; A, 1-31-08]