# BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATTER OF A COMMISSION	<b>N</b> )
RULEMAKING REGARDING NMPRC RULE	E )
17.9.568 NMAC INTERCONNECTION OF	F ) Docket No. 21-00266-UT
GENERATING RESOURCES WITH A	<b>A</b> )
NAMEPLATE CAPACITY RATING UP TO AND	<b>D</b> )
INCLUDING 10 MW CONNECTING TO A	<b>A</b> )
UTILITY SYSTEM	)

## **FINAL ORDER**

**THIS MATTER** comes before the New Mexico Public Regulation Commission (the "Commission") upon the Commission's own motion to amend, repeal and replace NMPRC Rule 17.9.568 NMAC that pertains to the Interconnection of Generating Facilities with a Nameplate Capacity Rating up to and including 10 MW; wherefore, being duly informed in the premises,

### THE COMMISSION FINDS AND CONCLUDES:

# A. Procedural History

- 1. The Commission initiated this proposed rulemaking on December 1, 2021 via the *Order Issuing Notice of Proposed Rulemaking and Closing Docket 20-00171-UT*.
- 2. Due to comments received from parties during this period of commentary, it was determined that the proposed rule should include technical aspects of interconnection within the rule itself as opposed to residing in a separate document from the Rule.
- 3. As a result, the Commission issued the *Order Terminating Rulemaking and Initiating Proposed Rulemaking and Notice of Proposed Rulemaking* on March 15, 2022 with a revised proposed rule incorporating more detailed technical aspects of interconnection.
- 4. Initial Comments were received from the following; New Mexico Rural Electric Cooperative Association ("NMRECA"), the Commission's Utility Division Staff ("Staff"), the Community for Solar Access ("CSA"), the Solar Energy Industries Association ("SEIA"), the

Renewable Energy Industries Association ("REIA"), Office of the Attorney General of New Mexico ('NMAG"), Kit Carson Electric Cooperative, Inc. ("KCEC"), Cypress Creek Renewables ("CCR"), El Paso Electric Company ("EPE"), Southwestern Public Service Company ("SPS"), The City of Las Cruces ("CLC"), Nexamp, Public Service Company of New Mexico ("PNM") and the Interstate Renewable Energy Council, Inc. ("IREC").

- 5. The Commission has fully reviewed and considered all comments by the parties.
- 6. The Commission received a joint request from NMRECA and EPE on May 13, 2022 for an extension of the response comment deadline due to the amount of initial comments received and the Commission granted the request to allow for additional time.
- 7. Response Comments were received from NMRECA, CSA, SEIA, REIA, Staff KCEC, EPE, CCR, SPS, PNM, NMAG, IREC and CLC.
- 8. A public hearing was held on June 17, 2022 with REIA, Sunnova Energy International, Energywell, PNM, Xcel Energy, CLC, EPE and IREC attending.
- 9. The Commission ordered further commentary issuing the *Order Opening Commentary Period and Request for Written Commentary* on September 20, 2022 for commentary specific to safety concerns on the proposed rule.
- 10. The Commission received a request for extension of deadlines from IREC on September 27, 2022 and the Commission partially granted the request on September 30, 2022.
- 11. Additional Comments were received by CSA, SEIA, REIA, IREC, EPE, PNM, and SPS.
- 12. Response comments were then additionally filed by CSA, SEIA, REIA, IREC, EPE, SPS and PNM.
- 13. On October 26, 2022, the record closed, as per the Order Partially Granting

  Final Order

Request for Extension of Deadlines for Written Comments filed on September 30, 2022.

14. The record of the rulemaking is complete, and the Commission has considered the

record for the purpose of adopting an Interconnection of Generating Facilities with a Nameplate

Capacity Rating up to and including 10 MW Rule (the "Rule") in this Order.

15. The following discussion of the comments in the record is organized broadly by

subject matter and more specifically by the issues to be addressed within each subject matter

area. At the beginning of each subject matter section, the portion(s) of the Act relevant to the

matter are as well as any relevant portion(s) of the Proposed Rule and the Additional Issues to be

Addressed in Formal Comment Process (the "Additional Issues"). For each issue or set of related

issues within each subject matter area, there is an abbreviated summary of relevant comments,

the recommendations to the Commission based on the review of all comments, and finally, the

Commission's decision. To the extent any individual comment made by a party during the

commentary period is not reflected in the summary of comments is not a basis for grounds that

the comment was not considered or reviewed by the Commission.

16. The rule adopted by the Commission in this Order (the "Rule") is attached hereto

as **Exhibit A**. To the extent that the Rule departs from the Proposed Rule, all such changes are

indicated as redlined changes. The Rule, when published, will incorporate such changes without

redlines.

**B.** Statement of the Case

17. In this Order, the Commission approves and adopts substantial revision to its rules

governing the interconnection to utility systems by electric generating facilities with a nameplate

rating up to and including 10 MW.

18. The existing Rule and associated policies embodied in the currently approved

Utility Interconnection Manual were last revised in October 2008. The Commission finds that the

current Rule and policies no longer adequately accommodate New Mexico energy policies or meet

consumer demand for evolving technologies and services that require behind-the-meter (BTM) or

front-of-the-meter (FTM) interconnection to utility distribution networks.

19. In addition, recently developed technical standards IEEE 1547-2018/IEEE1547.1-

2020/UL1741SB are being adopted by state jurisdictions across the nation to provide for advanced

functionalities for DC/AC inverters, and for testing and certification of interconnected devices.

20. Evidence provided in this proceeding, testimony and information bench requests

all indicate that New Mexico utilities both large and small are facing increasing demand from

customers who want to install rooftop photovoltaics and storage systems, interconnection requests

are on the rise, and some utility circuits are considered "at saturation" and unable to accommodate

new interconnections without significant upgrades and substantial costs.

21. New Mexico state policies such as the Energy Transition Act and the Community

Solar Act also have set the state on a course to more effectively integrate distributed energy

generation and storage into the electricity infrastructure. The expected addition of higher levels of

distributed generation brings additional stress to the utility network and impetus to revise and

modernize interconnection rules.

22. This Rule revision reflects an extensive effort to ensure transparency and early

stakeholder input in the rulemaking process, and it ensures that interconnection policies account

for and accommodate proper review of the increasing amounts of energy storage expected to be

installed in combination with distributed energy resources, especially solar photovoltaic facilities.

23. A critical aspect of interconnection is to define, and where warranted to limit, the

amount of electricity that will be injected by a generator into the utility distribution system. This

Rule provides for a robust technical review process to determine potential system impacts and to

identify any potential upgrades to the system that might be required to accommodate new

interconnections.

25.

24. The Rule, as adopted herein, represents a substantive updating of New Mexico's

interconnection process. It adds much needed detail and certainty to the screening and review

processes, and provides a more streamlined approach for smaller, less impactful projects, while

establishing rigorous Supplemental and Detailed review processes for projects that are determined

to have a greater potential impact.

C. Balancing the Past and the Future

In many ways, this proceeding illustrates how difficult it can be to change long-

standing regulatory policies and operational practices. The demands of evolving state and federal

policies requiring greater use of newer, environmentally cleaner energy technologies and

consumer demand for more direct and interactive participation in the electric services marketplace

have, in many respects, outpaced the existing regulatory structure.

26. When this proceeding began, the need for updating and revising New Mexico's

interconnection policies seemed clear. PNM, the largest electric utility in the state, had determined

that as many as 19 distribution circuits were "at capacity" and could not accommodate additional

customer requests to install solar photovoltaic (PV) systems on their own properties without

incurring high costs for system upgrades that made their projects infeasible. While the utility

asserts that it does not "reject" applications in such instances, customers were being informed that

their projects could not proceed without substantive additional to the distribution system, and that

there were no plans for such upgrades.

27. While the utility offers an on-line mapping service to illustrate where areas of

constraint were in effect, and where non-constrained circuits were available (just by typing in an

address), what solar customers and developers saw most was a large sea of red of constrained

areas, especially in areas of the utility territory that were fast growing and where customers desired

rooftop solar.

28. A second realization for regulators was that the rules for interconnection (Title 17.9.

568, NMAC) were sorely outdated, having been last updated in 2008 before such technologies as

solar PV and energy storage systems were becoming widespread and increasingly cost-effective

options for consumers seeking to reduce their reliance on utility power.

29. In conceptualizing the best way to address these issues, the Commission determined

that before it could issue a Notice of Proposed Rulemaking, it would be valuable to engage utilities

and industry stakeholders in a "Technical Advisory" working group process, to explore more

precisely what needed to change and work to achieve some level of agreement on how those

changes could be incorporated into a revised Interconnection Rule and standardized Manual to

update the existing Part 568 Rule.

30. Despite six months of regular meetings under the guidance of professional

facilitators, this effort was only partly successful. Many issues were indeed identified, and

multiple proposals for how to address them were discussed and debated. But the differences

between utilities and industry representatives were not bridged in this process, and the resulting

report and recommendations from the Technical Advisory Group facilitators (Final Report and

Recommendations) showed that, despite some level of agreement about certain issues, utilities declared they could not join a consensus on any of the matters.<sup>1</sup>

- 31. Also, the Advisory Group could not reach any agreement on a proposed revised Manual. As described in the Final Report, the most significant difference among parties was whether to structure a new Rule and Manual on either the "Model Interconnection Procedures" document developed by IREC, or to continue using the Federal Energy Regulatory Commission's Small Generator Interconnection Protocol (SGIP).
- 32. The utilities favored continued reliance on SGIP, which had last been updated in 2013 and was mostly geared toward the needs of Transmission Operators. In contrast, developer representatives argued that the IREC Model, while built upon an SGIP framework, was updated more recently in 2018 and was specifically drafted to suit the needs of accommodating interconnections at the distribution level and also featured processes specific to interconnection of energy storage systems, among other features.<sup>2</sup>
- 33. During the working group process and in comments, the utility sentiment was that it was better to use the familiar SGIP with some modifications, rather than employ the IREC updated process.<sup>3</sup> However, a sub-group comprised of utilities was unable to reach agreement on how to update a revised Manual and that task was not completed by the working group.

<sup>&</sup>lt;sup>1</sup> In particular, El Paso Electric Company objected to a characterization of any level of agreement on even the least controversial issues, claiming "misstatements" of its positions "on a variety of issues where EPE strongly disagreed with the proposal." EPE further asserted that its management "has not been provided adequate time to review" either the report or positions EPE representatives themselves took during the process. See El Paso Electric's comments on Version 1 and Version 2 of the Draft Report, September 6 and Sept. 21, 2021.

<sup>&</sup>lt;sup>2</sup> The Final Report incorporated a useful matrix developed in the working group that compared and contrasted the similarities and differences between the two models. See Section 2.6, pg. 16.

<sup>&</sup>lt;sup>3</sup> In comments on the draft report, Southwestern Public Service (SPS) argued for maintaining SGIP as the foundation of New Mexico's Interconnection policy SGIP, "Maintaining policies consistent with the FERC SGIP process can enable for greater efficiencies during rules update by providing greater focus to areas needing greater revision —for example, energy storage systems— while maintaining a well-vetted framework in other areas. *Final Order* 

34. The Commission proceeded with issuing a Notice of Proposed Rulemaking that

tried to incorporate a new policy structure for the Interconnection Rule that attempted to meld

proposals from both the utilities and the developers. Aside from offering draft rule language for

comment, the NOPR also specifically requested comments from parties on additional questions

about the major issues raised in the working group report.<sup>4</sup>

35. However, the Proposed Rule did not include a proposed revised Manual, instead

directing utilities to file a common revised Manual within 90 days of the effective date of the Rule.

The intent of the Commission was to first establish the policy platform for the Rule, based on

comments about the proposed Rule and answers to the additional questions.<sup>5</sup>

36. As noted in the Procedural History this version of the NOPR met with opposition

from parties, especially EPE, which objected to proceeding to consider a Rule that, while

referencing the Interconnection Manual in several places, did not include a Manual itself.<sup>6</sup>

37. Based on comments from stakeholders, particularly IREC, it was determined that

New Mexico is one of the very few states in which technical aspects of interconnection resided in

a separate document from the Rule. In response, the Commission suspended the NOPR comment

schedule and reissued a revised Draft Rule which incorporates the elements of a Manual into the

Rule.

Consistency with the FERC SGIP can also provide efficiencies for implementing and managing generation interconnection processes within the utility due to this broad acceptance of the FERC SGIP model."

<sup>&</sup>lt;sup>4</sup> See Additional Questions attachment to NOPR.

<sup>&</sup>lt;sup>5</sup> See Draft Proposed Rule, 17.9.568.8, December 1, 2021.

<sup>&</sup>lt;sup>6</sup> "Until EPE knows what the proposed changes to the Interconnection Manual changes are, it objects to the language incorporating the Interconnection Manual by reference," wrote EPE, along with raising several other objections to language in the proposed Rule. EPE Initial Comments on the Notice of Proposed Rulemaking ("NOPR"), February 11, 2021.

38. The inability of stakeholders to reach agreement on a revised Interconnection

Manual – or even among utilities to be able to agree amongst themselves – during the Technical

Advisory working group process admittedly complicated this proceeding.<sup>7</sup> In issuing the revised

Draft Rule via the March 15 Order <sup>8</sup> the Commission attempted to rectify this by proposing what

amounted to a comprehensive revamp of the Interconnection Rule and screening processes as

proposed by the Interstate Renewable Energy Coalition, drawing in part on some provisions of

IREC's BATRIES report and recommendations that were presented during a workshop and

entered into the record as part of IREC's comments.<sup>9</sup>

39. Although this policy choice by the Commission results in a more complex and

detailed Rule than was initially proposed, it also results in a far more comprehensive

Interconnection process than would be possible by piecemealing updates to an outdated SGIP

process. The Commission finds that the proposed Rule puts New Mexico and its utilities in a

better position to address the challenges of the evolving energy services market.

40. PNM in its most recent comments on the Proposed Rule recognizes, although it

does not fully support, the forward looking nature of this Rule. "While the Commission seeks to

adopt in this rulemaking some of the most advanced interconnection practices in the country, the

fact remains that New Mexico is behind other states in its capability to implement advanced

interconnection practices as proposed by the Commission."10

<sup>7</sup> See New Mexico Interconnection Rules, Report and Recommendations, Final Report; October 15, 2021 (aka Final

<sup>8</sup> Public Service Company's Comments and Proposed Recommendations to the Commission's Revised Rule, May 11, 2022,

<sup>9</sup> Ibid.

<sup>10</sup> Public Service Company of New Mexico's Comments in Response to the September 20, 2022, Commission

Order, October 14, 2022, pg.2

41. Other utilities joined the resistance to change. SPS in its most recent Comments

called IREC's framework "largely untested and do not reflect the expertise of utilities in the actual

operation of the grid." SPS also claimed the "extensive changes" "could inhibit the safety and

reliability of the SPS system."11

42. Utilities also assert, as they have throughout this rulemaking process, that there

needs to be more time and discussion of the proposals before adoption.

43. This Order will further review the Safety aspects of the Rule and various arguments,

and it is mindful of the utilities' fundamental responsibility to ensure safe and reliable electric

service, even as they must deal with increased demands on their systems cause by increased

penetration of distributed energy resources.

44. For this reason, the Commission directs utilities and other stakeholders to continue

working together toward improvements to the Interconnection Rule and practices, such that the

Rule put in place by this Order is not considered the "last word" on what future changes may need

to be implemented. However, the Commission urges that any such proposed changes be targeted

toward resolving documented safety problems that arise, and are not based on vague assertions of

potential adverse impacts.

45. The Commission also notes that it understands that the changes to Interconnection

processes entail potential additional costs to utilities' ratepayers and interconnection applicants,

and the Rule tries to balance such liabilities through its cost-sharing provisions (see section

17.9.568.11).

<sup>11</sup> Southwestern Public Service Company's Response to Order Opening Comment Period and Request for Written

Commentary, October 14, 2022, Pg. 1

**46.** Utilities are also urged to take advantage of the unprecedented opportunity to seek

federal funds meant to promote Grid Modernization via the Infrastructure Act and the more recent

Inflation Reduction Act

**D.** How This Rule Revises the Existing Interconnection Process

47. The Rule establishes a date certain, March 28, 2023, after which new DC/AC

inverters are required to conform to new functionalities enabled by the updated IEEE 1547-2018

standards (17.9.568.11). It also specifies the need for conformance with nine existing and pending

codes and standards that apply to interconnection of distributed energy resources ("DER").

48. The most fundamental change to the existing interconnection rule and process is

the incorporation within the Rule of several technical screening matters, plus a set of Standard

Agreement Forms (see Appendix A to the Rule) that previously resided in a separate

Interconnection Manual.

49. As part of the Technical Advisory process that preceded the release of the Notice

of Proposed Rulemaking (NOPR), parties were unable to reach agreement on either the form or

content of a revised Manual document. The original Draft Rule issued as part of the NOPR did

not provide a proposed revised Manual, instead directing utilities to collaborate on a Manual that

reflected the Rule once it was approved by the Commission. However, several parties objected to

proceeding unless the provisions of a Manual were made public.

50. Based on comments from stakeholders, it was determined that New Mexico is one

of the very few states in which technical aspects of interconnection resided in a separate document

from the Rule. In response, the Commission suspended the NOPR comment schedule and reissued

a revised Draft Rule which incorporates the Manual into the Rule.

51. PNM then introduced a proposal for each utility to create its own Interconnection

Manual that would in some technical respects, supersede the language of an adopted Rule. The

Commission does not accept that proposal for reasons because such a proposal would substantially

delay adoption of the Interconnection Rule.

52. Instead, this Order recognizes the need for each utility to have as a supplement to

the common Rule, a set of Technical Interconnection and Interoperability Requirements (TIIR)

that provide interconnection customers with more specific guidelines that are not embodied in the

Rule and may be specific to the needs and constraints of each utility's system. Although the TIIR

will be especially valuable in the on-going development of communication and control protocols

for advanced inverters and evolving technical standards (such as IEEE-1547-2018 referenced

above), the document may also address individualized technical circumstances or specific

locational constraints for each utility.

53. Utilities and other stakeholders are encouraged to participate in an ongoing

technical advisory working group, with or without direct Commission facilitation, to develop what

should be in each utility's TIIR, the process for obtaining Commission approval and for updating

those guidelines without the need to revisit or formally amend the adopted Rule.

54. Recognizing that prospective interconnected facilities should be screened and

reviewed based on their potential impacts on the utility distribution system, the Rule specifically

adopts a process for determining the "export capacity" of facilities. Categories include non-

exporting DER and limited export DER (plus provisions for dealing with inadvertent exports).

55. To minimize the potential for adverse impacts to safety and reliability of the

network, the Rule provides for use of specified "export control" technologies and methodologies

to ensure that the DER will operate within technical limits identified in the Rule (17.9.568.12).

56. The Rule institutes an optional Pre-Application Review process to provide

interconnection applicants and the utility with information about system conditions at their point

of interconnection, without having to submit a full interconnection application (17.9.569.14).

57. In light of continuing utility concerns about the safety and reliability of new

technologies, the Rule provides for four levels of technical screens including a Simplified Process

for the least impactful interconnections, a "Fast Track" review, and if projects cannot meet

Simplified or Fast Track eligibility, processes for Supplemental Reviews or a Detailed Study

Process (17.9.568.15 through 17.9.568.18).

58. At the recommendation of utilities, the final Rule also reinstates some safety

provisions that previously were excised as no longer necessary in light of the use of export control

technologies (17.9.568.29).

59. One of the essential changes to the interconnection application review is in

replacing a traditional "rule of thumb" that triggered potentially expensive technical reviews for

new applicants seeking interconnection on distribution circuits already experiencing a 15 percent

"penetration" or aggregate capacity of DER. Instead, commencing after December 31, 2023, the

aggregate export capacity of facilities seeking a Simplified Review may not exceed 100 percent of

the relevant minimum load normally supplied by the distribution circuit (17.9.568.15. B.). Other

screening thresholds are also specified in the provisions describing screens.

60. The Commission emphasizes that these are not strict limits that would prohibit

additional interconnections on a given circuit, but are instead thresholds for determining whether

an interconnection application requires additional review to determine possible impacts and

relevant costs for any needed upgrades to accommodate the facility.

61. The Rule also prohibits utilities from imposing arbitrary limits on available

interconnection capacity (i.e., limiting new interconnections to projects less than 50 percent of the

circuit's rated capacity) without a valid technical reason and explanation that is provided to the

applicant in writing. In providing detail about the specific system threshold or limitation, the utility

shall provide an estimate of the cost of and expected timeline for conducting necessary upgrades

to accommodate the interconnection application. This allows for the applicant to decide whether

to proceed with the project at that location.

62. The Rule establishes new fee structures for interconnection applications, and sets

certain timelines for both utilities and applicants to ensure timely review of projects. These

timelines generally allow for flexibility as long as both parties are informed and agree on

extensions (for example, see 17.9.568.24 (C.). Applicants may also request a one-time extension

of timelines set in the Rule (17.9.568.26).

63. Other additions to the Rule include a dispute resolution process (17.9.568.26) and

a set of reporting requirements so that the Commission and the public are kept informed about the

status of interconnection requests (17.9.568.28). This requirement also provides utilities with the

opportunity to describe how the new processes are working and whether there is a potential for

improvements (17.9.568.28.B. (10)).

64. While maintaining the general principle that Interconnection Applicants should pay

for any upgrades to the utility system that would be required to accommodate the interconnecting

facility, the Rule allows for the Commission to consider, on a case by case basis, whether a

particular situation may be eligible for cost-sharing (whether among similarly situated applicants

or in rates).

65. The Rule cites authority under the Grid Modernization Act of 2020 (62-8-13

NMSA 1978) allowing for Commission consideration of system benefits provided by needed

upgrades that may be eligible for cost sharing. Establishing policies for such cost-sharing is

currently deferred to a future Grid Modernization rulemaking, although there is a near-term

opportunity for cost-sharing of engineering studies by more than one applicant that may be using

the same distribution facilities (17.9.568.19).

E. How This Rule Interacts with the Community Solar Act Implementation

**Rule Title 17.9.573** 

66. As previously described, this Rule replaces and revises the Interconnection Rule

and associated Interconnection Manual embodied in Title 17.9.568 that was adopted in October

2008. These interconnection procedures are applicable to all state-jurisdictional interconnections

of generating facilities with a rated capacity up to and including 10 megawatts (MW).

67. The Commission recognizes that there are a variety of smaller-scale generation and

distributed energy resource types that fall within the 10 MW export capacity limits of this Rule.

Within this category of interconnected facilities is a relatively new classification, Community

Solar projects with capacity no greater than 5 MW, which have been authorized by the Community

Solar Act of 2021 (SB 84, Section 62-16B-1 NMSA 1978) and a subsequent Commission

rulemaking.<sup>12</sup>

68. The Community Solar Act specifically determined that the Commission "establish

reasonable, uniform, efficient and non-discriminatory standards, fees and processes for the

interconnection of community solar facilities that are consistent with the commission's existing

<sup>12</sup> Docket No. 21-00112-UT

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interconnection rules and interconnection manual that allows a qualifying utility to recover

reasonable costs for administering the community solar program and interconnection costs for each

community solar facility...".<sup>13</sup>

69. To ensure the consistency required by the Legislature, the Commission has

previously indicated all prospective interconnection applications for Community Solar projects

should be reviewed under 17.9.568 – and not in a separate interconnection process. 14

70. Neither the procedures nor the requirements included in this revised Rule apply to

generating facilities interconnected or approved for interconnection prior to the effective date of

these procedures. Nonetheless, many prospective Community Solar project developers have

decided to not wait for the revised rule to take effect and have applied for interconnection under

the existing Rule. This has created a strain on utility interconnection staff and a backlog of

applications for review or projects taking up space in the interconnection queue even though they

may not be selected for the Community Solar program.

71. There is no easy resolution of this unfortunate situation, as utilities are required by

federal rules to accept all interconnection requests, and this Commission does not have direct

jurisdiction over non-utility generators or the authority to outright deny interconnection requests.

72. At this time, the Commission re-affirms its prior directive that interconnection

applications will be reviewed under the Part 568 version in effect at the time the application is

submitted (see 17.9.568.7).

<sup>13</sup> Community Solar Act Section 7 (6). Emphasis added.

<sup>14</sup> See comments from PRC advisor Arthur O'Donnell at Community Solar workshop, April 14, 2022.

73. Projects are not considered "community solar projects" unless and until they are selected for the program via the pending competitive solicitation and enter a Subscriber Organization Participating Generator Agreement with the respective utility.

74. Even if they have obtained a place in the interconnection queue, projects that have "jumped the gun" face the real risk that they will not be eligible for Commission approval of a power purchase agreement with the respective utility if such a contract was not derived from a successful resource solicitation via the Commission's recently revised Integrated Resource Planning and Procurement Rule.<sup>15</sup>

# C. Sectional Commentary Analysis, Recommendation and Decision

#### i. **17.9.568.1 NMAC – Issuing Agency**

75. The Commission did not propose any additional changes to, and no comments were provided for, Section One of the Proposed Rule.

#### ii. 17.9.568.2 NMAC – Scope

76. PNM recommended changing rated capacity in Section B to nameplate rating, however IREC comments that 17.9.569 NMAC uses rated capacity so rated capacity should be used or in the alternative nameplate capacity used in parentheses with rated capacity.

- 77. Recommendation. The Commission should accept the proposed changes to Section Two as proposed in Exhibit A.
- 78. <u>Decision</u>. The Commission finds the recommended language persuasive and hereby adopts them as proposed in Exhibit A.

#### 17.9.568.3 NMAC – Statutory Authority iii.

<sup>&</sup>lt;sup>15</sup> Title 17.7.3, adopted August 31, 2022, in 21-00128-UT.

79. The Commission did not propose any additional changes to, and no comments were provided for, Section Three of the Proposed Rule.

## iv. 17.9.568.4 NMAC – Duration

80. The Commission did not propose any additional changes to, and no comments were provided for, Section Four of the Proposed Rule.

### v. 17.9.568.5 NMAC – Effective Date

- 81. The Commission did not propose any additional changes to, and no comments were provided for, Section Five of the Proposed Rule.
- 82. The effective date will be in compliance with the publication date of the Rule in the New Mexico Register.

# vi. 17.9.568.6 NMAC – Objective

83. The Commission did not propose any additional changes to, and no comments were provided for, Section Six of the Proposed Rule beyond renumbering of the section.

## vii. 17.9.568.7 NMAC – Definitions

- 84. Staff commented that the NMAC requires that definitions must be listed in section seven, the section has been renumbered to be compliant with NMAC rules.
- 85. NMRECA commented to remove the definition of "daytime minimum load" to make the term coincide with solar production. IREC recommended removal of the term and replacing the term with a defined term for "relevant minimum load".
- 86. PNM commented to change the definition for "distribution system" to premises rather than homes and industries.
- 87. PNM commented for the recommendation of the use of the NEC definition for energy storage system. IREC recommended using a definition that more closely follows the

structure of the IEEE 1547-2018 and P1547.9 standards, however IREC indicated that the NEC

or current definition will likely achieve the same goal.

88. The definition for "feasibility study" is clarified to be a preliminary technical

assessment per PNM's commentary, however terms for system impact study or facilities study

are defined in this section negating the need to identify that a feasibility study is a separate study

as by its own definition it is not synonymous with the other studies.

89. KCEC suggestions would include a transmission system impact study in the

feasibility study definition. However, it is unclear if such an impact study should be defined

within the feasibility study or the system impact study for purposes of the two definitions.

90. The definition for "Grid Network" is deleted per PNM's suggestion to refine the

network definitions.

91. The definition for "IEEE standards" is expanded to include International

Electrotechnical Commission (IEC) and CIGRE per PNM's suggestion.

92. The definition for "inadvertent export" proposed by IREC includes recommended

changes commented by SPS.

93. SPS proposed additional language to further detail what does and does not

constitute a "material modification" for purposes of the definition.

94. PNM indicated a preference to require all inverter replacements to submit a new

interconnection application, however SPS proposed changes would exclude substitutions of like-

kind equipment from being a "material modification" under the definition.

95. The definition of "net rating" has been deleted as PNM correctly commented that

the term is not used in the proposed Rule.

- 96. The definition of "ongoing operating capacity" has been deleted as the definition is no longer required after other revisions.
- 97. SPS proposed defining the term "parallel operation" in its comments. IREC suggested using a definition that is more precise and which recognizes that backup facilities that only momentarily operate in parallel should not be subject to the same review process.
- 98. PNM proposed striking the definition of "point of interconnection" ("POI") indicating that point of common coupling should be the used for the terminology instead. IREC points out though that POI is the term used in IEEE 1547-2018. Proposed language has been added to the definition indicating the terms have the same meaning for clarity purposes.
- 99. Changes to the definition of "primary network feeder" based upon PNM's suggestions have been incorporated including eliminating the combination feeders description.
- 100. The term for "unintended island" was changed to "unintentional island" per the language used in IEEE 1547-2018.
- 101. <u>Recommendation</u>. The Commission should accept the proposed changes to the definitions of Section Seven as proposed in Exhibit A.
- 102. <u>Decision</u>. The Commission finds the recommended language persuasive and hereby adopts them as proposed in Exhibit A.

## viii. 17.9.568.8 NMAC – Applicability

103. PNM recommended adding: "At the discretion of the utility, the utility may apply the rules that were in effect for Part 568 when an interconnection application was filed if that interconnection application remains pending prior to the effective date of the procedures and requirements set forth herein."

104. The Commission notes that the standard practice of the Commission is to apply

the Rules that are in place at the time of an application. The Commission is not inclined currently

to establish a new threshold for purposes of this Rule for a pending application that has been

submitted prior to this Order or the effective date of the proposed Rule. The Commission notes

that the utilities could request the Commission's approval to treat any applications received after

a date certain (eg. Date of this Order) or as a matter of process (eg. study process not initiated) as

affected by the Rule during the implementation phase of the Rule, however the Commission is

not moved to allow full discretion of the utility to apply the rules that were in effect for Part 568

on a case-by-case basis for pending applications. The Commission encourages utilities to submit

a threshold statement for approval for any pending applications prior to the effective date of the

new Rule.

105. Recommendation. The Commission should accept the proposed changes to the

Section Eight as proposed in Exhibit A.

106. Decision. The Commission finds the recommended language persuasive and

hereby adopts them as proposed in Exhibit A.

ix. 17.9.568.9 NMAC – Liberal Construction

107. The Commission did not propose any additional changes to, and no comments were

provided for, Section Nine of the Proposed Rule.

x. 17.9.568.10 NMAC – Applicable Codes and Standards

108. Conformance with codes and standards regarding UL 1741 has been added to the

list of applicable codes and standards.

109. PNM suggested the inclusion of the term "as a whole" for the equipment to be

considered certified, however does not elaborate or provide specificity as to whether the term is

intended to cover equipment that can be packaged or other equipment that is typically not

certified together. As the term is ambiguous, the Commission is not moved to include the term at

this time.

110. Recommendation. The Commission should accept the proposed changes to the

Section Ten as proposed in Exhibit A.

111. <u>Decision</u>. The Commission finds the recommended language persuasive and

hereby adopts them as proposed in Exhibit A.

xi. 17.9.568.11 NMAC – IEEE-1547-2018 Adoption

112. Significant edits have been made to the Section based upon recommendations

submitted by IREC setting a date certain that generating facilities shall be required to comply

with IEEE and setting minimum requirements for abnormal and normal performance

requirements.

113. Recommendation. The Commission should accept the proposed changes to the

Section Eleven as proposed in Exhibit A.

114. <u>Decision</u>. The Commission finds the recommended language persuasive and

hereby adopts them as proposed in Exhibit A.

xii. 17.9.568.12 NMAC – Determination of Export Capacity Status

115. As with many other aspects of this revision to Interconnection Rules, the issue of

defining and incorporating "export capacity" of an interconnected device or system has been

controversial from the very beginning of the Technical Advisory working group discussions.

116. A critical aspect of interconnection is to define, and where warranted to limit,

the amount of electricity that will be injected by a generator into the utility distribution system.

The working group report documented much of the discussion about how to categorize

interconnections by non-export, limited export or inadvertent export status.<sup>16</sup>

This Rule in 17.9.568.12 provides for a robust technical review process to 117.

determine potential system impacts and to identify any potential upgrades to the system that might

be required to accommodate new interconnections.

Although the issue largely relates to accommodating distributed energy resources 118.

that combine generation with energy storage systems (ESS), there remains a fundamental

difference of positions between utilities and other stakeholders regarding whether to use the

aggregated nameplate capacity as the measure of a DER's potential input to the utility network, or

whether such impacts can be limited via use of protection control systems (PCS).

119. IREC, in reviewing the March 15 Rule version, stated, "[T]he rule should

distinguish between a project's export capacity and its nameplate rating and appropriately employ

each depending on the relevant technical concern." IREC then proposed adding a technical screen

to address the possibility of inadvertent energy exports from export-limited facilities.<sup>17</sup>

IREC's particular screens should use export capacity, while other recommendations 120.

are included in the Rule, generally that some screens, including the evaluation of reverse power

flows, and shared transformer screen. Screens to evaluating impacts on network protectors, that

look at service imbalance between two sides of a volt service, or those that evaluate fault current

or short-circuit contributions should utilize nameplate capacity.

<sup>16</sup> See Final Report, Sections 3.8 and 3.9, pages 47-56.

<sup>17</sup> See IREC Comments on the March 15, 2022, Notice of Proposed Rulemaking Regarding Proposed Revisions to

17.9.568 NMAC, pg. 7.

121. The proposed Rule allows that interconnection applications may be screened under

simplified or fast-track process based only on the amount of capacity being injected into the system

- effectively discounting potential additional output from ESS, but to prevent impacts on system

safety and reliability, any inadvertent export from a DER must comply with specified limits. The

export capacity specified by the interconnection customer in the application will be documented

as the maximum allowed export capacity of the DER in the Interconnection Agreement

(17.9.568.12).

122. Still, the dispute lingers, and in the most recent comments, PNM "urges the

Commission to screen interconnection applications based on the full nameplate rating of all the

interconnecting facilities at issue, including ESS devices." PNM asserts that basing screens on

less than the full nameplate capacity "will result in unsafe scenarios, particularly during abnormal

operating conditions," particularly the potential for voltage or fault concerns.<sup>18</sup>

123. Should the Commission insist on export capacity as the measure in screenings,

PNM stated that it "must still be able to require the full nameplate capacity rating information in

the interconnection application and in its Technical Interconnection and Interoperability

Requirements (TIIR) documents such that PNM can make a safety decision on voltage issues or

fault contributions, where needed."19

124. In response, the Joint Commenters point out that under the proposed Rule, Sections

17.9.568.16 (B)(7) and (8) specify that fast track screens do evaluate fault current regardless of

whether the project is or is not exporting. <sup>20</sup> IREC's response comments state that PNM's assertion

<sup>18</sup> PNM Comments in Response to September 20, 2022 Commission Order, pg. 7.

<sup>19</sup> IBID, pg. 8.

<sup>20</sup> Joint Response Comments, Oct. 14, 2022, pg. 4, footnote 8.

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of unsafe situations are "unspecific and unsupported," adding that "Under the Proposed Rule, non-

export systems will be subject to the same fault contribution screens as any exporting project." <sup>21</sup>

125. The Commission determines that IREC's proposals effectively screen for potential

inadvertent export problems but is not opposed to utilities having the information about full

nameplate capacity in the data collected from applicants.

126. <u>Recommendation</u>. The Commission should accept the proposed changes to the

Section Twelve as proposed in Exhibit A.

127. Decision. The Commission finds the recommended language persuasive and

hereby adopts them as proposed in Exhibit A.

xiii. 17.9.568.13 NMAC – Application Review Process

128. Perhaps the most fundamental change to the existing interconnection rule and

process is the incorporation within the Rule of several technical and screening matters. In light of

continuing utility concerns about the safety and reliability of new technologies, the Rule provides

for four levels of technical screens - including a Simplified Process for the least impactful

interconnections, a "Fast Track" review, and if projects cannot meet Simplified or Fast Track

eligibility, processes for Supplemental Reviews or a Detailed Study Process (17.9.568.15 through

17.9.568.18).

129. One of the essential changes to the interconnection application review is in

replacing a traditional "rule of thumb" that triggered potentially expensive technical reviews for

new applicants seeking interconnection on distribution circuits already experiencing a 15 percent

"penetration" or aggregate capacity of DER. Instead, commencing after December 31, 2023, the

<sup>21</sup> IREC Reply Comments, October 21, 2022, pg. 6.

aggregate export capacity of facilities seeking a Simplified Review may not exceed 100 percent of

the relevant minimum load normally supplied by the distribution circuit (17.9.568.15. B.). Other

screening thresholds are also specified in the provisions describing screens.

130. The Commission emphasizes that these are not strict limits that would prohibit

additional interconnections on a given circuit, but are instead thresholds for determining whether

an interconnection application requires additional review to determine possible impacts and

relevant costs for any needed upgrades to accommodate the facility.

131. The Rule also prohibits utilities from imposing arbitrary limits on available

interconnection capacity (i.e., limiting new interconnections to projects less than 50 percent of the

circuit's rated capacity) without a valid technical reason and explanation that is provided to the

applicant in writing. In providing detail about the specific system threshold or limitation, the utility

shall provide an estimate of the cost of and expected timeline for conducting necessary upgrades

to accommodate the interconnection application. This allows for the applicant to decide whether

to proceed with the project at that location.

132. IREC's proposals are detailed and robust providing a path forward for

implementation, in comparison to the alternative proposed by PNM that each utility should

develop its own individual Interconnection Manual with an undetermined time table. The

Commission finds that path would only delay implementation of the Rule far into the future and

pose complications for applicants that may face very different processes depending on utility

territory.

33. Having taken into consideration the complaints and criticisms levied by the utilities,

and editing the Draft Rule in response, the Commission once again issue a revised Rule for

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Comment via the September 20 Order.<sup>22</sup> Rather than detailing the entire history of comments on

each iteration of the Rule, this discussion will focus on the last set of Comments and Responses in

response to that Order.

134. SPS requested additional language that "the utility, at its sole options may

disapprove the interconnection if it determines the interconnection applicant cannot be

interconnected safely and reliably" even if the application passes applicable screens. PNM also

requests to deny interconnection "at its sole option" when a project has passed the screens

However, SPS and PNM not detail or elaborate how that sole discretion of a utility would apply

to a customer who may have spent money and resources for the screening procedure in order for

it to pass the screening procedures only to have a utility reject the application. Nor does SPS or

PNM provide a compelling argument why sole discretion is necessary in light of the revisions to

section 568.29 providing specific authorizations for utilities to disconnect under several

conditions.

135. PNM claims that "approval of the Proposed Rules in their current form may result

in unsafe situations that are discovered post-interconnection." However, PNM does not make

recommended changes to the screen process that would close any alleged potential unsafe

situations. As stated above, situations discovered post-inter-connection are subject to

disconnection under several condition. Further, as Rule 568 indicates that screening criteria must

be located in the rule itself, allowing the utilities a sole discretionary option undermines the

transparency intended by Rule 568.

<sup>22</sup> ORDER OPENING COMMENTARY PERIOD AND REQUEST FOR WRITTEN COMMENTARY, September

20, 2022

136. <u>Recommendation</u>. The Commission should accept the proposed changes to the

Section Thirteen as proposed in Exhibit A.

137. <u>Decision</u>. The Commission finds the recommended language persuasive and hereby

adopts them as proposed in Exhibit A.

xiv. 17.9.568.14 NMAC – Optional Pre-Application Report

138. The Rule institutes an optional Pre-Application Review process to provide

interconnection applicants and the utility with information about system conditions at their point

of interconnection, without having to submit a full interconnection application (17.9.569.14).

139. While the FERC SGIP process has in recent years been revised to include a

provision for a pre-application review, the existing 17.8.568 rule has not incorporated that process

until this Proposed Rule. Each of the investor-owned utilities, however, have reported to the

Commission that they have in place some equivalent of an initial review, ranging from an informal

check to a more formalized review process to identify whether a circuit or transformer may be at

capacity, thus requiring additional study to determine if the circuit can accommodate the

interconnection.

140. In its initial comments, PNM asserted that it does not believe a pre-application

review process should be necessary for behind-the-meter interconnections citing its on-line

mapping tool that provides prospective interconnection applicants with the ability to visualize

whether their target interconnection is constrained or can readily allow for interconnection. PNM

recommended that pre-application review be available only for front-of-the meter applicants but

that if they are performed, there should be a fee assessed in the \$700 to \$1,000 range.<sup>23</sup>

<sup>23</sup> Public Service Company's Comments and Proposed Recommendations to the Commission's Revised Rule, May 11, 2022, pg. 26.

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141. Overall, however, there was no opposition to the Rule allowing for an optional pre-

application review. SPS in its initial comments agreed that a pre-application review provides value

by helping to "guide applicants to a location with more availability, resulting in more viable

projects in an interconnection queue."24

142. The New Mexico Attorney General agreed with other parties that all pre-

application reports, regardless of size or interconnection in front of or behind the meter, be treated

the same. NMAG proposes the pre-application report have a standard fee – in a range of \$300 to

\$750 -- and a processing timeline of 15 business days.<sup>25</sup>

143. Citing the experience of its affiliated utilities in other jurisdictions, SPS indicated

that sometimes developers seek information about multiple sites, sometimes located miles apart.

SPS recommended that the language of the Rule explicitly state that applicants may request the

optional report "for a specific site." SPS also suggested that applicants should provide latitude and

longitude information to help locating the more precise point of interconnection.<sup>26</sup>

144. The issue of establishing timelines and deadlines for performing studies,

responding to inquiries and the like has been a topic of disagreement throughout the process of

revising Part 568 – from the technical advisory working group all the way to the most recent set

of comments. Without detailing each of the various positions, it is fair to characterize them this

way: project developers want firm, generally shorter timelines and certainty in the review process,

while utilities want more time and flexibility.

145. While some project developers wanted certainty that a pre-application review be

determinative of available capacity, each of the utilities urged the Commission to include a caveat

<sup>24</sup> Southwestern Public Service Company's Initial Comments, May 6, 2022, pg. 14.

<sup>25</sup> Office of the Attorney General's Initial Comments, May 6, 2022, pg. 10

<sup>26</sup> Ibid, pg. 15.

that information about capacity availability on a given circuit is reflective of a moment in time and

non-binding. SPS also sought language that even a finding of availability may be contingent on

further studies.<sup>27</sup>

Given the general support for including a Pre-Application Review process, the 146.

Commission agrees that such a process will provide all parties with valuable information that could

direct interconnection applicants to suitable locations, or inform a decision as to whether or not to

proceed with more extensive studies that might be required.

147. In line with the NMAG's proposed fee structure that takes size of the project into

consideration, the applicant seeking a pre-application review pay the utility \$300.00 for up to one

MW system size, and \$500.00 for over one MW. If a utility can provide documentation that the

cost is higher, then the requesting party shall pay that additional amount.

148. The Commission agrees with SPS's desire to have more specific locational

information and has included a provision in 17.9.568.14.A.(3) to that effect.

149. For the pre-application review process, the Commission has determined that it is

reasonable to expect that the reviews should be completed in 20 business days for system sizes up

to one MW, and 30 business days for system sizes greater than one MW, from the receipt of the

completed request form and payment of the fee. If it can be documented that a utility cannot meet

this deadline due to circumstances beyond their control, then the utility will be given more time

but must notify the applicant.

150. The Rule also has added a specific caveat to applicants that "Due to the dynamic

nature of the distribution electric power system, accuracy cannot be guaranteed past the time of

<sup>27</sup> Ibid. pg. 16.

completion of a report. The pre-application report shall be non-binding on the utility and shall not confer any rights to the interconnection customer. The provided information does not guarantee that an interconnection may be completed" (17.9.568.14.G).

- 151. <u>Recommendation</u>. The Commission should accept the proposed changes to the Section Fourteen as proposed in Exhibit A.
- 152. <u>Decision</u>. The Commission finds the recommended language persuasive and hereby adopts them as proposed in Exhibit A.

# xv. 17.9.568.15 NMAC – Simplified Process

- 153. In response to multiple party concerns regarding the procedures that apply to each level of review, IREC restructured the review process sections giving each process a dedicated section in the Rule including the procedures and screens specific to that process.
- 154. SPS proposed that simplified review should be made available for ""generating facilities with nameplate capacity up to 25 kW, which may be paired with a non-exporting storage system with nameplate capacity up to 25 kW," for a total nameplate capacity of 50 kW. IREC agreed with this concept and proposed language that small projects with a nameplate rating of up to 50kW can safely proceed through the simplified process, so long as the export capacity of the project is limited to 25 kW or less.
- 155. Additional language was inserted regarding Reference Point of Applicability Review based upon concerns expressed by the utilities including PNM's October 14 Comments which stated that it needed the reference point of applicability ("RPA") for each advanced inverter proposed by an interconnection application to ensure a safe and reliable interconnection. PNM proposed that the RPA be added as an applicable screen for both the simplified and fast-track screening process.

- 156. <u>Recommendation</u>. The Commission should accept the proposed changes to the Section Fifteen as proposed in Exhibit A.
- 157. <u>Decision</u>. The Commission finds the recommended language persuasive and hereby adopts them as proposed in Exhibit A.

### xvi. 17.9.568.16 NMAC – Fast Track Process

- 158. A fast track process is essential to establishing a basis by which the state can process interconnection applications in a timely manner and avoid backlogs to process the applications promptly.
- 159. PNM's suggestions indicate a preference for a "fast track with or without a system impact study for certified generating facilities that pass certain specified screens and likely would have a power rating of 2.0 megawatts (MW) or less, subject to a utility specific interconnection manual that specifies fast-tracking processing of a rating of 250 kilowatts (kW) or less for safety and reliability concerns. . . .".
- 160. Requiring a study for each project above 250 kW inevitably would slow down the application process and create backlogs of applications. This would also be a significant departure from existing interconnection rules and PNM fails to provide sufficient justification to depart from the current rules or current national practices.
- 161. SPS proposed revisions to the fast track penetration screen which use a 15% of peak (or maximum) load screen as the default, but also allow the utility to "consider" using a 100% of minimum load screen. IREC's proposal is similar, however it recommends the Commission require utilities to use the 100% of minimum load screen and only allow use of the 15% of maximum load if minimum load data is not available. IREC further recommends that the utilities be required to use the minimum load analysis in all cases after December 31, 2023.

language was also inserted in this Section regarding Reference Point of Applicability Review based upon concerns expressed by the utilities including PNM's October 14 Comments which

In keeping with consistency to language added in Section Fifteen, additional

stated that it needed the reference point of applicability ("RPA") for each advanced inverter

proposed by an interconnection application to ensure a safe and reliable interconnection. PNM

proposed that the RPA be added as an applicable screen for both the simplified and fast-track

screening process.

163. Recommendation. The Commission should accept the proposed changes to the

Section Sixteen as proposed in Exhibit A.

164. Decision. The Commission finds the recommended language persuasive and

hereby adopts them as proposed in Exhibit A.

xvii. 17.9.568.17 NMAC – Supplemental Review

165. IREC has proposed several standard screens for supplemental review and

recommends the Commission include a fixed fee for conducting the review. PNM has

commented to delete supplemental review procedures from Rule 568.

166. The national trend in this regard is to allow for a supplemental review to allow for

projects to interconnect without expensive detail surveys. As many utilities have expressed an

interest in additional time for system impact and facility studies, the supplemental review allows

utilities additional paths to obtain additional information and resources they require to safely

interconnect projects.

167. Recommendation. The Commission should accept the proposed changes to the

Section Seventeen as proposed in Exhibit A.

168. <u>Decision</u>. The Commission finds the recommended language persuasive and

hereby adopts them as proposed in Exhibit A.

xviii. 17.9.568.18 NMAC – Detailed Study Process

169. EPE and other parties commented that a system impact study completion period

of 30 days in insufficient time for completion of the study. IREC proposes 40 days in keeping

with their Model Rules and notes that multiple states provide for a 30 day period indicating that

30 days is a manageable timeline for study completion.

170. Similarly, EPE and other parties requested additional time for the facilities study

completion period of 45 days where upgrades are required and 30 days where no upgrades are

required. The Commission finds the proposed time periods for completion are reasonable as the

additional 15 business days provides three additional weeks for review for projects requiring

upgrades.

171. Recommendation. The Commission should accept the proposed changes to the

Section Eighteen as proposed in Exhibit A.

172. <u>Decision</u>. The Commission finds the recommended language persuasive and

hereby adopts them as proposed in Exhibit A.

xix. 17.9.568.19 NMAC – Cost Sharing for Interconnection Upgrades

173. The matter of whether there should be some opportunity for "cost-sharing" of

potential costs of either interconnection studies or upgrades to a utility system (circuits,

substations, transformers or the like) necessary to accommodate an interconnection has been

controversial from the start of discussions to the final version of the revised Rule.

174. Utilities have held fast to the traditional principles of "cost causation" – that a party

whose interconnection requires some upgrade should pay the full cost. Other stakeholders argued

that if more than one developer is sharing an upgrade, there could be "clustered" studies to share

the cost, joint responsibility for upgrade costs among developers, or even – citing terms of New

Mexico's Grid Modernization Act of 2020 – a potential that ratepayers may share in costs should

there be system benefits to the upgrades.<sup>28</sup> At the transmission level, FERC has long employed

analysis of system benefit/individual benefit for cost-sharing of upgrades.

175. New Mexico is not alone in entertaining this debate, and the technical advisory

working group explored, but could not reach any agreement on, various methods for cost sharing

under consideration around the country.<sup>29</sup> In comments and responses, the utilities have generally

sought to excise the Cost-sharing provisions from this Rule.

While maintaining the general principle that Interconnection Applicants should pay 176.

for any upgrades to the utility system that would be required to accommodate the interconnecting

facility, the Rule allows for the Commission to consider, on a case by case basis, whether a

particular situation may be eligible for cost-sharing (whether among similarly situated applicants

or in rates).

The Rule cites authority under the Grid Modernization Act of 2020 (62-8-13 177.

NMSA 1978) allowing for consideration of system benefits provided by needed upgrades that may

be eligible for cost sharing. Establishing policies for such cost-sharing is currently deferred to a

future Grid Modernization rulemaking, although there is an opportunity for cost-sharing of studies

by more than one applicant that may be using the same distribution facilities (17.9.568.19).

<sup>28</sup> New Mexico Interconnection Rules, Report and Recommendations, Final Report; October 15, 2021, Section 3.4 Cost Allocation Options, pgs 33-34.

<sup>29</sup> Particularly in New York State, and now as part of a FERC rulemaking inquiry RM22-14-000, June 16, 2022.

With regard to application of the Grid Modernization Act, KCEC stated a

"consensus amongst utilities in that all agree that any cost-sharing process implemented in these

rule must comply wholly with the Grid Modernization Act...including a requirement that all

factors of consideration for cost sharing should be satisfied."<sup>30</sup>

179. The Commission has amended the cost-sharing section of the Rule by including all

of the factors from the Grid Modernization Act. However, KCEC misinterprets that all of the

factors "should be satisfied." The Act states that the Commission, in reviewing project applications

"shall consider" seven factors, not "shall require". Indeed, some of the factors are mutually

exclusive of each other.<sup>31</sup>

While the Commission respects the utilities' argument that "it is the utility's

customers who will be required to cover these additional costs,"32 it is not true in every case that

cost sharing necessarily falls to ratepayers, as the Rule specifically contemplates sharing among

interconnection applicants that may be utilizing the same network facilities. In addition, under the

Rule, any assignment of costs into rate base would necessarily involve some finding of a shared

benefit for ratepayers.

181. Recommendation. The Commission should accept the proposed changes to the

Section Nineteen as proposed in Exhibit A.

<sup>30</sup> Response Comments of Kit Carson, pg. 5. Emphasis added.

<sup>31</sup> See, for example, Section 3 B. 2 and 3 in the Act citing projects that are:

"(2) designed to support connection of New Mexico's electrical grid into regional energy markets and increase New Mexico's capability to supply regional energy needs through export of clean and renewable electricity;

(3) reasonably expected to increase access to and use of clean and renewable energy, with consideration given for increasing access to low-income users and users in underserved communities..."

<sup>32</sup> Ibid, pg. 5

182. <u>Decision</u>. The Commission finds the recommended language persuasive and hereby adopts them as proposed in Exhibit A.

xx. 17.9.568.20 NMAC – Interconnection Agreement

183. The section contained minor corrections updating the process names to the

revised terminology.

184. Recommendation. The Commission should accept the proposed changes to the

Section Twenty as proposed in Exhibit A.

185. Decision. The Commission finds the recommended language persuasive and

hereby adopts them as proposed in Exhibit A.

xxi. 17.9.568.21 NMAC – Permission to Operate

186. SPS proposed language to allow for an inspection prior to the anticipated start

date of the generating facility. IREC agreed with the language for an inspection, but included

further detail which they took from their model rules along with some modifications per SPS's

suggestions.

187. SPS further proposed removing the language in Section C(3) regarding

notification on delays since that is now provided for in section 568.24(C).

188. SPS proposed language to indicate a time limit on the amount of time a project

can sit before getting permission to operate. In this manner, a project can not hold a queue

position indefinitely.

189. Recommendation. The Commission should accept the proposed changes to the

Section Twenty-One as proposed in Exhibit A.

190. <u>Decision</u>. The Commission finds the recommended language persuasive and

hereby adopts them as proposed in Exhibit A.

#### xxii. 17.9.568.22 NMAC – Interconnection Application Flow Chart

- 191. Language was amended in this section from requiring utilities to use the screen criteria, to providing a flow chart of the review process and screens as guidance in the Appendix.
- 192. <u>Recommendation</u>. The Commission should accept the proposed changes to the Section Twenty-Two as proposed in Exhibit A.
- 193. <u>Decision</u>. The Commission finds the recommended language persuasive and hereby adopts them as proposed in Exhibit A.

# xxiii. 17.9.568.23 NMAC – General Provisions Applicable to Interconnection Applications

- 194. Language was amended regarding the application fee if the generating facility is non-export only, reducing the fee to \$150.00 if it has a nameplate rating below 100 kW.
- 195. <u>Recommendation</u>. The Commission should accept the proposed changes to the Section Twenty-Three as proposed in Exhibit A.
- 196. <u>Decision</u>. The Commission finds the recommended language persuasive and hereby adopts them as proposed in Exhibit A.

#### xxiv. 17.9.568.24 NMAC – General Provisions Applicable to Utilities

- 197. Language was added establishing deadlines for utilities to notify a customer if it cannot meet a deadline provided in the Rule and to require the utility to keep the applicant updated of changes to the expected completion date.
- 198. Joint comments filed by CSA, SEIA and REIA suggested added language that a utility must notify the applicant of a delay in deadline no later than seven days before the deadline and that only in extreme circumstances should the delay exceed one week. PNM and EPE encouraged the Commission to reject the proposed language as unreasonable as the current

rule states utilities shall make reasonable efforts to meet the time frames and work in cooperation with the applicant.

- 199. <u>Recommendation</u>. The Commission should accept the proposed changes to the Section Twenty-Four as proposed in Exhibit A.
- 200. <u>Decision</u>. The Commission finds the recommended language persuasive and hereby adopts them as proposed in Exhibit A.

## xxv. 17.9.568.25 NMAC – General Provisions Applicable to Interconnection Customers

201. The Commission did not propose any additional changes to, and no comments were provided for, Section Twenty-Five of the Proposed Rule.

#### **xxvi.** 17.9.568.26 NMAC – Extensions

- 202. The language for this section was added in order to provide the applicant an extension of one timeline set by the Rule up to one half of the time originally allotted and ordering that the utility shall not refuse the request. Further extensions are allowable so long as the extension does not unreasonably delay the processing of later queued applications.
- 203. <u>Recommendation</u>. The Commission should accept the proposed changes to the Section Twenty-Six as proposed in Exhibit A.
- 204. <u>Decision</u>. The Commission finds the recommended language persuasive and hereby adopts them as proposed in Exhibit A.

#### xxvii. 17.9.568.27 NMAC – Dispute Resolution

205. SPS commented that without a time limit for the resolution of dispute, projects may become stuck in limbo or fail to be completed. SPS suggest that a utility be granted the

ability to deem a project "withdrawn" and continue processing other interconnection projects in the queue if a project is "withdrawn" due to dispute.

206. PNM and EPE comment that the language should be revised to require both parties to have an electrical engineer present when seeking to resolve technical disputes. PNM and EPE also note that a "qualified technical representative" is not a defined term in the rule and

that qualifications may be subject to dispute.

207. NMRECA suggests that language be amended to reflect a 30 business day deadline instead of a 90 business day deadline for the submission of a formal complaint to the

Commission.

208. Recommendation. The Commission should accept the proposed changes to the

Section Twenty-Seven as proposed in Exhibit A.

209. Decision. The Commission finds the recommended language persuasive and

hereby adopts them as proposed in Exhibit A.

xxviii. 17.9.568.28 NMAC – Reporting Requirements

210. This section incorporates a new set of reporting requirements so that the

Commission and the public are kept informed about the status of interconnection requests

(17.9.568.28). This requirement also provides utilities with the opportunity to describe how the

new processes are working and whether there is a potential for improvements (17.9.568.28. B.

(10)).

211. During the discussions of the Technical Advisory Group, there were two very

different positions expressed on reporting, with utilities desiring very limited requirements and

industry representatives seeking more extensive reports that provided a number of different metrics

to ascertain how many projects were undergoing the interconnection process at each step of the

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process, how long various reviews were taking to conduct, and information about why some

projects might be failing to complete interconnections.<sup>33</sup>

212. The industry group and the utilities could not reach consensus.

213. SPS argued in comments that "it is unclear what the intent of this reporting would

be and what purpose it would serve, and . . . any such new required reporting will necessarily

increase burdens on the utility and costs to consumers, at a minimum."<sup>34</sup>

214. The Attorney General, however, found value in reporting. "The reporting

requirements for electric utilities to publish an interconnection report bi-annually on their websites

will help DER project developers have a realistic set of expectations regarding how long it could

potentially take for them to connect their systems to the grid. It will also help the Commission to

obtain data-driven insights" the NMAG stated.<sup>35</sup>

215. The City of Las Cruces simply stated, "[A]ny public information is better than the

process in place now," although the city argued that the information should be made available for

a longer period than the proposed three years.<sup>36</sup>

216. The Rule merges the disparate positions, requiring aggregated data reported by the

utilities twice yearly that would provide the Commission with a sense of application trends,

numbers of resources, types of resources, and more general information that the utilities should

collect and maintain. Importantly, the bi-annual reports to the Commission adopt the utilities'

suggestion to include a narrative of how the process is working and where there is potential for

improvement by the utility or interconnection applicants.

<sup>33</sup> New Mexico Interconnection Rules, Report and Recommendations, Final Report October 15, 2021, Section 3.6,

pgs 42-45.

<sup>34</sup> SPS Initial Comments, pg. 16.

<sup>35</sup> NMAG Initial Comments, Pg. 12.

<sup>36</sup> City of Las Cruces Response, pg. 10

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- 217. <u>Recommendation</u>. The Commission should accept the proposed changes to the Section Twenty-Eight as proposed in Exhibit A.
- 218. <u>Decision</u>. The Commission finds the recommended language persuasive and hereby adopts them as proposed in Exhibit A.

#### xxix. 17.9.568.29 NMAC – Safety Provisions

- 219. EPE suggested that they would like to see clearer terms on when disconnection is permitted. They reference the language in section 11.2 of the interconnection manual which allows disconnection whenever the utility "determines that any equipment connected to the Utility's System is problematic or unsafe".
- 220. IREC proposes language similar to their Model Interconnection Agreement providing a more detailed set of circumstances for which the customer shall separate from the utility system and when utility disconnection can occur. This provides the utility company with protection for their system if the facility is not operating in the manner consistent with the terms and conditions.
- 221. Language is also added based on requests from the utilities requiring a load break disconnect switch between the generating facility and the utility system except for certain facilities with a maximum capacity rating of 10 kW or less. This addition provides additional system safety and security for the utility.
- 222. <u>Recommendation</u>. The Commission should accept the proposed changes to the Section Twenty-Nine as proposed in Exhibit A.
- 223. <u>Decision</u>. The Commission finds the recommended language persuasive and hereby adopts them as proposed in Exhibit A.

#### **17.9.568.30 NMAC – Variances**

224. The Commission did not propose any additional changes to, and no comments were

provided for, Section Thirty of the Proposed Rule.

225. This concludes the Commission's summaries of the comments and the various

issues raised in this proceeding and the statements of the Commission's decisions with regard to

such issues. The language of the Rule, Exhibit A hereto, reflects the Commission's decisions. Any

comment or suggestions in the record not incorporated in Exhibit A are denied by the Commission

for inclusion into the Rule.

226. The Commission has jurisdiction over this matter.

227. The Commission has the authority to promulgate the Rule under the N.M. Const.

art. XI, § 2, and under NMSA 1978, §§ 8-8-4(B)(10) and 62-16B-7.

228. The Commission finds that the Rule, attached as **Exhibit A** hereto, should be

adopted with the amended proposed changes by the Commission.

IT IS THEREFORE ORDERED:

A. The Rule, attached as Exhibit A hereto, is hereby adopted with the amended

proposed changes by the Commission, for inclusion in the New Mexico Administrative Code, at

Title 17 (Public Utilities and Utility Services), Chapter 9 (Electric Services), at Part 568 titled

"Interconnection of Generating Facilities with a Nameplate Rating up to and Including 10 MW

Connecting to a Utility System."

B. The Rule shall be published in the New Mexico Register, as required by the State

Rules Act, NMSA 1978, Sections 14-4-1 to -11. The publication shall be at the earliest opportunity

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available after sufficient time has passed for the filing of any motions for rehearing or

reconsideration of this matter and for the Commission's consideration of any such motions.

C. The Commission's Office of General Counsel is hereby authorized to make non-

substantive formatting and proofreading changes to Exhibit B, as necessary, prior to publication.

D. This Order and the Rule shall be provided to the public in accordance with the State

Rules Act.

E. Copies of this Order shall be emailed to all persons on the attached Certificate of

Service if their email addresses are known, and if not known, mailed to such persons via regular

mail.

November 2022.

F. This Order is effective immediately.

ISSUED under the Seal of the Commission at Santa Fe, New Mexico, this 30<sup>th</sup> day of

NEW MEXICO PUBLIC REGULATION COMMISSION

/s/ Cynthia B. Hall, electronically signed

CYNTHIA B. HALL, COMMISSIONER, DISTRICT 1

/s/ Jefferson L. Byrd, electronically signed

**JEFFERSON L. BYRD, COMMISSIONER, DISTRICT 2** 

/s/ Joseph M. Maestas, electronically signed

JOSEPH M. MAESTAS, COMMISSIONER, DISTRICT 3

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### /s/ Theresa Becenti-Aguilar, electronically signed THERESA BECENTI-AGUILAR, COMMISSIONER, DISTRICT 4

/s/ Stephen Fischmann, electronically signed
STEPHEN FISCHMANN, COMMISSIONER, DISTRICT 5



#### **EXHIBIT A**

TITLE 17 PUBLIC UTILITIES AND UTILITY SERVICES

CHAPTER 9 ELECTRIC SERVICES

PART 568 INTERCONNECTION OF GENERATING FACILITIES WITH A NAMEPLATE

RATING UP TO AND INCLUDING 10 MW CONNECTING TO A UTILITY SYSTEM

**17.9.568.1 ISSUING AGENCY:** New Mexico Public Regulation Commission.

[17.9.568.1 NMAC – Rp, 17.9.568.1 NMAC, xx/xx/2022]

#### 17.9.568.2 SCOPE:

- **A.** This rule, and the definitions, standards, procedures and screening processes described herein apply to every electric utility including rural electric cooperatives and investor-owned utilities operating within the state of New Mexico that is are subject to the jurisdiction of the New Mexico public regulation commission. These standards and procedures apply to both qualifying and non-qualifying facilities.
- **B.** The standards and procedures described in this rule (17.9.568 NMAC) apply only to the interconnection of generating facilities with a <u>nameplate</u> rated capacity up to and including 10 MW. The standards and procedures described in 17.9.569 NMAC apply to the interconnection of generating facilities with a rated capacity greater than 10 MW and are unchanged by this rule.
- C. Interconnection requests are reviewed based on the combined nameplate ratings of systems accounting for their export capacity and energy storage operating mode. For purposes of review screens, only the capacity that is designed to inject electricity to the utility's distribution or transmission system, other than inadvertent exports and fault contribution, will be used.
- **CD.** All interconnection contracts between a utility and an interconnection customer existing at the time 17.9.568 NMAC is revised and adopted shall automatically continue in full force and effect. Material modifications to existing facilities or operations may require a new interconnection application and agreement and will be subject to review under the current conditions of the electric power system. Any changes made to existing interconnection eontracts agreements shall conform to the provisions of 17.9.568 NMAC in effect at the time modification is executed.

[17.9.568.2 NMAC – Rp, 17.9.568.2 NMAC, xx/xx/2022]

**17.9.568.3 STATUTORY AUTHORITY:** This rule is adopted under the authority vested in this commission by the New Mexico Public Regulation Commission Act, Section 8-8-1 *et seq.* NMSA 1978, the Public Utility Act, Section 62-3-1 *et seq.* NMSA 1978; the Energy Transition Act, 62-18-1 *et seq.* NMSA 1978; the Grid Modernization Act, Section 62-8-13 NMSA 1978; and the Community Solar Act, Section 62-16B-1 NMSA 1978. [17.9.568.3 NMAC – Rp, 17.9.568.3 NMAC, xx/xx/2022]

17.9.568.4 **DURATION:** Permanent.

[17.9.568.4 NMAC – Rp, 17.9.568.4 NMAC, xx/xx/2022]

**17.9.568.5 EFFECTIVE DATE:** \_\_\_\_\_\_, 2022, unless a later date is cited at the end of a section. [17.9.568.5 NMAC – Rp, 17.9.568.5 NMAC, xx/xx/2022]

17.9.568.6 APPLICABILITY: Neither these procedures nor the requirements included hereunder apply to generating facilities interconnected or approved for interconnection prior to the effective date of these procedures.

17.9.568.76 OBJECTIVE: The purpose of this rule is to set forth common interconnection requirements and a common interconnection process based on a standard screening process for utilities and interconnection customers to expeditiously interconnect generating facilities with a rated capacity up to and including 10 MW in a safe and reliable manner.

[17.9.568.6 NMAC – Rp, 17.9.568.6 NMAC, xx/xx/2022]

**17.9.568.8 LIBERAL CONSTRUCTION:** If any part or application of this rule is held invalid, the remainder of its parts and any other applications of the rule shall not be affected. [17.9.568.7 NMAC Rp, 17.9.568.7 NMAC, xx/xx/2022]

**17.9.568.97 DEFINITIONS:** Terms used in rule 17.9.568 NMAC shall have the following meanings:

A. Definitions beginning with "A":

- (1) Aggregate capacity or aggregate generation capacity means the aggregated ongoing operating capacities of all generator facilities across multiple points of common coupling, within a defined portion of the distribution system.
- (2)(1) Applicant means a person or an entity that has filed an application to interconnect a generating facility to an electric delivery power system. An applicant may include:
  - (a) A customer who applies for interconnection of For a generating facility that will offset part or all of the load of a utility customer, the applicant is that customer, whether the customer owns the generating facility or a third party owns the generating facility.
  - (b) An owner of For a generating facility that applies for interconnection of a generating facility that sells electric power to a utility,
  - (c) A subscriber organization as defined by the Community Solar Act, Section 62-16B-2(M) NMSA 1978. the owner of the generating facility is the applicant.
- (3)(2) Area network means a section of an electric delivery power system served by multiple transformers interconnected in an electrical network circuit, generally used in large, densely populated metropolitan areas, to provide high reliability of service. Area network has the same meaning as the term "grid network" as defined in IEEE Std 1547.6<sup>TM</sup>. An area network is also referred to as a grid network or a street network.
- (4)(3) Auxiliary load means electrical power consumed by any equipment necessary to operate the generator or energy storage system. This is intended for in-front-of-the-meter systems.
  - B. Definitions beginning with "B":
    - (1) Business day means Monday through Friday, excluding holidays observed by the utility.
  - C. Definitions beginning with "C":
- (1) Certified means a piece of equipment has been tested in accordance with the applicable requirements of IEEE Std 1547<sup>TM</sup>-2018 and IEEE Std 1547.1<sup>TM</sup>-2020 by any nationally recognized testing laboratory (NRTL) recognized by the United States Occupational Safety and Health Administration to test and certify equipment pursuant to the applicable standard and the equipment has been labeled and is publicly listed by such NRTL at the time of the interconnection application. Equipment installed prior to March 28, 2023 will also be considered certified if it has been tested in accordance with IEEE Std 1547<sup>TM</sup>-2003 and 1547.1<sup>TM</sup>-2005.
- (2) Customer options meeting means a meeting designed to review the status of the <u>interconnection</u> application initial review results, or to determine next steps needed to permit safe and reliable interconnection.
  - D. Definitions beginning with "D":
- (1) Daytime minimum load means the lowest measured circuit/substation load coincidental with solar production.
- (1) **Detailed study process** means the procedure for evaluating an interconnection application that may include a scoping meeting, feasibility study, system impact study, and/or facilities study as described in section 17.9.568.18 NMAC.
- (2) **Distributed energy resource (DER)** means the equipment used by an interconnection customer to generate and/or store electricity that operates in parallel with the electric distribution system. DER may include, but is not limited to: an electric generator and/or energy storage system, a prime mover, or combination of technologies capable of injecting power and energy into the electric distribution system, which also includes the interconnection equipment necessary to safely interconnect with the distribution system. DER may not always be interconnected with the bulk power system. DERs may include distributed generation (DG) resources, distributed energy storage, demand response energy efficiency, and electric vehicles and chargers that are connected to the electric distribution power grid. DERs may be capable of exporting active power to an electric power system (EPS). The DER includes the customer's interconnection facilities but shall not include the area EPS operator's interconnection facilities.
- (3) **Distribution service** means delivering energy over the electric distribution power system pursuant to the approved tariffs of the utility other than services directly related to the interconnection of a generating facility under these interconnection procedures.
- (4) **Distribution system** means the utility's facilities and equipment used to transmit electricity to ultimate usage points, such as homes and industries known as premises, directly from nearby generators or from interchanges with higher voltage transmission networks which transport bulk power over longer distances. The voltage levels at which distribution systems operate differ among areas.
- (5) **Distribution upgrade** means the additions, modifications, and upgrades to the utility's distribution system at or beyond the point of common coupling to facilitate interconnection of the generating facility

and render the service necessary to effect the interconnection customer's operation of on-site generation. Distribution upgrades do not include interconnection facilities.

#### E. Definitions beginning with "E":

- (1) Electric power system (EPS) means the equipment operated and maintained by a utility (may include: independent system operators, transmission owner/operator, vertically integrated utilities, electric cooperatives, municipals, and distribution companies) to deliver electric service to end-users, including transmission and distribution lines, substations, transformers, spot networks and area networks.
- (2) Energy storage system (ESS) means any commercially available, customer-sited system or utility-sited system, including batteries and batteries paired with on-site generation, that is capable of retaining, storing, and delivering electrical energy by chemical, thermal, mechanical, or other means. For the purposes of this rule, an energy storage system can be considered part of a DER or a DER in whole that operates in parallel with the distribution system.
- (3) Export capacity means the maximum possible simultaneous generation of amount of power that can be transferred from the generating facility to the distribution system. Export capacity is ealculated as the maximum amount of exported power as permitted at either the nameplate rating, or a lower amount if limited using and acceptable means identified in section 17.9.568.12 NMAC point of common coupling.

#### F. Definitions beginning with "F":

- (1) **Facilities study** means a study that specifies and estimates the cost of the equipment, engineering, procurement, and construction work needed to implement the conclusions of the system impact study.
- (2) Fast Track means a the process for determining that evaluating an interconnection application will not result utilizing established screens as described in section 17.9.568.16 NMAC in adverse impacts and the project may proceed without supplemental review.
- (3) Fault current means the current produced during a short circuit on the electric power system measured in amperes.
- (3)(4) Feasibility study means a study that preliminary technical assessment of the proposed interconnection that identifies any potential adverse system impacts that would result from the interconnection of the generating facility.

#### **G.** Definitions beginning with "G":

- (1) Generating capacity means the maximum nameplate rating of a generating facility in alternating current (AC), except that where such capacity is limited by any of the acceptable methods of limiting electrical export; generating capacity shall be the net capacity as limited though the use of such methods (not including inadvertent export).
- (2)(1) Generating facility means the equipment used by an interconnection customer to generate, store, manage, interconnect and monitor electricity. A generating facility includes the interconnection equipment required to safely interconnect the facility with the distribution system. DERs are generating facilities.
- (3)(2) Grid network means a secondary network system with geographically separated network units where the network side terminals of the network protectors are interconnected by low voltage cables that span the distance between sites. The low-voltage cable circuits of grid networks are typically highly meshed and supplied by numerous network units. Grid network is also commonly referred to as area network or street network. For definition, refer to "Area Network".

#### H. Definitions beginning with "H":

(1) **Host load** means the electrical power, less the DER auxiliary load, consumed by the customer at the location where the generating facility is connected.

#### I. Definitions beginning with "I":

- (1) **IEEE** means the Institute of Electrical and Electronic Engineers.
- (2) **IEEE standards** means the standards published by the IEEE, often in collaboration with American National Standards Institute (ANSI), National Institute of Standards and Technology (NIST), UL. International Electrotechnical Commission (IEC), CIGRE, and National Fire Protection Institute (NFPA), available at www.ieee.org.
- (3) Inadvertent export means the unscheduled export of active power from a DER generating facility, exceeding a specified magnitude and for a limited duration that does not exceed limitations generally due to fluctuations in terms of magnitude or duration, as specified in UL 1741 CRD for Power Control Systems (PCS)-load-following behavior.
- (5) **Interconnection agreement** means a standard form agreement between an interconnection customer and a utility that governs the interconnection of a generating facility to a utility's electric delivery system, as well as the ongoing operation of the generating facility after it is interconnected.

- (6) **Interconnection application** means the request by an interconnection customer to either interconnect a new generating facility, or to increase the capacity or make a material modification to the operating characteristics of an existing generating facility that is interconnected with the utility's electric power system.
- (7) **Interconnection customer** means any person who proposes to interconnect a generating facility with the utility's system.
- (8) Interconnection facilities means the utility's interconnection facilities and the interconnection customer's interconnection facilities. Collectively, interconnection facilities include all facilities and equipment between the generating facility and the point of common coupling, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the generating facility to the utility's electric power system in a safe and reliable manner. Interconnection facilities are sole use facilities and shall not include distribution upgrades.
- (9) Interconnection facility upgrade cost sharing means the allocation of distribution interconnection facility upgrade costs among multiple generator facility projects that utilize the hosting capacity created by an interconnection facility a distribution upgrade.
- (10) Interconnection procedures means the procedures specified in <u>Sections</u> 12 through <u>2123</u> of this rule.
  - J. Definitions beginning with "J": [RESERVED]
  - K. Definitions beginning with "K": [RESERVED]
  - L. Definitions beginning with "L":
- (1) <u>Limited export means the exporting capability of a DER whose generating capacity is limited by the use of any configuration or operating mode described in section 17.9.568.12 NMAC.</u>
- (2) Line section means that portion of a utility's electric <u>power</u> system connected to a customer that is bounded by automatic sectionalizing devices or the end of the distribution line.

#### M. Definitions beginning with "M":

- (2)(1) Material modification means a modification to machine data, equipment configuration or to the interconnection site of the DER at any time after receiving notification by the utility of a complete interconnection application that has a material impact on the cost, timing, or design of any interconnection facilities or distribution upgrades, or a material impact on the cost, timing, or design of any interconnection application with a later queue priority date or material impact on the safety or reliability of the utility electric power system. A change to the point of interconnection would require either a new interconnection application or a change in queue position. A material modification does not include, for example, (a) a change of ownership of a generating facility, (b) a change or replacement of generating equipment that is a like-kind substitution in size, ratings, impedances, efficiencies, or capabilities of the equipment specified in the original interconnection application, or (c) a reduction in the output of the generating facility of 10 percent or less. Replacement of existing inverters with new inverters that conform to new standards after March 28, 2023, will not be considered a material modification, so long as the generating facilities output or export status does not change as a result.
- (3)(2) **Minimum load** means the lowest measured circuit/substation load regardless of time of day.
- (4)(3) Minor modification means any modification to a utility's electric delivery power system that involves little limited work or low costs. Minor modifications include, but are not limited to, activities like changing the fuse in a fuse holder cut-out or changing the settings on a circuit recloser. Replacement of existing inverters with new inverters that conform to new standards after March 28, 2023, will be considered a minor modification, so long as the generating facilities output or export status does not change as a result. Minor modifications shall not require utility design or construction.

#### N. Definitions beginning with "N":

- (1) Nameplate rating means the sum total of maximum rated power output of a DER's constituent generating units and/or ESS, as identified on the manufacturer's nameplate, regardless of whether it is limited by any approved means.
- (2) Net rating means the nameplate rating of the generating facility less the consumption of electrical power of the auxiliary load.
- (3)(2) Network system means a collection of spot networks, secondary networks, or combinations of such networks on a primary network feeder or primary network feeders that supply them. This may also consist of primary feeders networked ("tied together") to supply connected loads.
- (4)(3) **Network transformer** means a transformer designed for use in a vault to feed a variable capacity system of interconnected secondaries.

(5)(4) Non-export or non-exporting means when the DER is sized and designed using any of the methods described in Section 17.9.568.12 NMAC, such that the output is used for host load only and no electrical energy (except for any inadvertent export) is transferred from the generating facility to the distribution system.

#### O. Definitions beginning with "O":

- (1) Ongoing operating capacity means the actual simultaneous generating capacity, accounting for the operational differences of load offset and export. If the contribution of energy storage to the total output is limited by programing of the maximum active power output, use of a power control system, use of a power relay, or some other mutually agreeable, on site limiting element, only the capacity (defined as ongoing operating capacity) that is designed to inject electricity to the utility's distribution or transmission system (other than inadvertent exports and fault contribution) will be used within certain technical screens and evaluations.
- (2)(1) Operating mode means the mode of DER operational characteristics that determines the performance during normal and abnormal conditions. For example, an operating modes can include such as "export only," "import only," and "no exchange."

#### P. Definitions beginning with "P":

- (1) <u>Parallel Operation</u> means the simultaneous operation of a generating facility with power delivered or received by the electric power system while interconnected. Parallel operation includes only those generating facilities that are interconnected with the electric power system for more than 60 cycles (one second).
- (1)(2) Parties means the applicant and the utility in a particular interconnection agreement. "Eeither party" refers to either the applicant or the utility.
- (2)(3) **Person** means, for purposes of this rule, an individual, firm, partnership, company, rural electric cooperative organized under Laws 1937, Chapter 100 or the rural electric cooperative act, corporation or lessee, trustee or receiver appointed by any court.
- (3) Point of common coupling means the point where the small generator facility is electrically connected to the electric distribution system. The point of common coupling is the point of measurement for the application of Institute of Electrical and Electronics Engineers standard (IEEE) 1547–2018.
- (4) **Point of interconnection** means the point where the interconnection facilities connect with the electric distribution system. <u>Point of interconnection has the same meaning as the term "point of common coupling" as defined in IEEE 1547-2018.</u>
- (6)(5) Power control system (PCS) means systems or devices which electronically limit or control steady state currents to a programmable limit and certified under UL 1741 CRD for power control systems by a nationally recognized testing laboratory.
- (7)(6) **Primary network feeder** means a feeder that supplies energy to a network system or the combination of a network system and other radial loads. Dedicated primary network feeders are feeders that supply only network transformers for the grid secondary network, the spot network, or both. Non dedicated primary network feeders, sometimes called combination feeders, are feeders that supply both network transformers and non-network load.
- (8)(7) Power conversion unit (PCU) means an inverter or AC generator, not including the energy source.
  - (8) **Premise** means a piece of land or real estate including buildings and other appurtenances

#### thereon.

- (9) **Protective function** means the equipment, hardware, or software in a generating facility (whether discrete or integrated with other functions) for the purpose of protecting against conditions that, if left uncorrected, could result in harm to personnel, damage to equipment, loss of safety or reliability, or operation outside pre-established parameters required by the interconnection agreement.
  - Q. Definitions beginning with "Q.": [RESERVED]
  - R. Definitions beginning with "R": [RESERVED]
- (1) Rated capacity means the total AC nameplate rating of the power conversion unit(s) at the point of common coupling.
- (2) Reference point of applicability (RPA) means the location where the interconnection and interoperability performance requirements, as specified by IEEE 1547-2018, apply.
- (3) Relevant minimum load means the lowest measured circuit or substation load coincident with the generating facility's production. For solar-only facilities this shall be the daytime minimum load.
  - S. Definitions beginning with "S":

- **(1)** Secondary network means an AC distribution system where the secondaries of the distribution transformers are connected to a common network for supplying electricity directly to consumers. There are two types of secondary networks; grid networks (also referred to as area networks or street networks) and spot networks.
- **Simplified process** means the procedure for evaluating an interconnection application for a small certified inverter-based DER described in section 17.9.568.15 NMAC.
  - **Small utility** means a utility that serves fewer than 50,000 customers.
- (3)Spot network means a section of an electric delivery system that uses two or more intertied transformers to supply an electrical network circuit. A spot network is a form of area network generally used to supply power to a single utility customer or to a small group of utility customers, and has the same meaning as the term is used in IEEE Std 1547TM.
- Supplemental review means additional engineering studies evaluation to determine any requirements for processing if a generating facility can be interconnected following the application through the expedited (simplified or fast track) process or a without the need for detailed study as described in section 17.9.568.17 NMAC.
- Study process means the procedure for evaluating an interconnection application that includes the scoping meeting, feasibility study, impact study, and facilities study.
- (6)(5) System emergency means a condition on a utility system that is likely to result in imminent significant disruption of service to customers or is imminently likely to endanger life or property.
- (7)(6) System impact study means a study that identifies and details the electric system impacts that would result if the proposed generating facility were interconnected without project modifications or electric system modifications, focusing on the adverse system impacts preliminarily identified in the feasibility study (if conducted), or to study potential impacts, including but not limited to those identified in the scoping meeting. A system impact study shall evaluate the impact of the proposed interconnection on the safety and reliability of the electric power system.
  - T. **Definitions beginning with "T": [RESERVED]**
- Technical Interconnection and Interoperability Requirements (TIIR) documents are public documents, often utility specific, which include requirements for interconnection, interoperability, capabilities, and their utilization (settings), and grid integration (e.g., protection coordination, telemetry).
  - U. **Definitions beginning with "U":**
- UL means the company by that name which has established technical standards for safe operations of electrical devices, previously known as Underwriter's Laboratory.
- UL 1741 CRD for PCS means the certification requirement decision for power control systems for the standard titled "Inverters, Converters, Controllers and Interconnection System Equipment for Use With Distributed Energy Resources". (March 8, 2019), Underwriters Laboratories Inc., 333 Pfingsten Road, Northbrook IL 60062-2096.
- Unintended Unintentional island means the creation of an island without the approval (3)of the utility an unplanned island per IEEE 1547-2018.
- **Utility** means a utility or public utility, as defined in Subsection G of Section 62-3-3 NMSA 1978, serving electric customers subject to the jurisdiction of the commission.
  - V.
  - Definitions beginning with "V": [RESERVED]
    Definitions beginning with "W": [RESERVED] W.
  - X. **Definitions beginning with "X": [RESERVED]**
  - **Definitions beginning with "Y": [RESERVED]** Y.
  - **Definitions beginning with "Z": [RESERVED]** Z.

[17.9.568.9 NMAC – Rp, 17.9.568.9 NMAC, xx/xx/2022]

**APPLICABILITY:** All generating facilities that operate in parallel with the utility electric power 17.9.568.8 system are required to have an interconnection review and an interconnection agreement to ensure safety, system reliability, and operational compatibility. These interconnection procedures are applicable to all state-jurisdictional interconnections of generating facilities with a rated capacity up to and including 10 megawatts (MW). Generating facilities with a rated capacity greater than 10 megawatts (MW) shall be conducted pursuant to 17.9.569 NMAC. Neither these procedures nor the requirements included hereunder apply to generating facilities interconnected or approved for interconnection prior to the effective date of these procedures.

**17.9.568.9 LIBERAL CONSTRUCTION:** If any part or application of this rule is held invalid, the remainder of its parts and any other applications of the rule shall not be affected.

[17.9.568.7 NMAC – Rp, 17.9.568.7 NMAC, xx/xx/2022]

#### 17.9.568.10 APPLICABLE CODES AND STANDARDS:

- **A.** The interconnection customer shall install, operate, and maintain the generating facility and the interconnection equipment in a safe manner in accordance with the rules for safety and reliability set forth in the latest editions of the national electrical code, other applicable local, state, and federal electrical codes, and prudent electrical practices.
- **B.** In order to qualify for any interconnection procedures, each generating facility generator shall be in conformance with the following codes and standards (or their successors) as applicable, <u>unless otherwise</u> <u>provided by law:</u>
- (1) IEEE Std 1547<sup>TM</sup>, IEEE standard for interconnection and interoperability of distributed energy resources with associated electric power systems interfaces, as amended by IEEE 1547a<sup>TM</sup>-2020, including use of IEEE 1547.1<sup>TM</sup>-2020 testing protocols to establish conformity;
- (2) IEEE Std 1547.1<sup>TM</sup>-.2020<sup>TM</sup>, standard conformance test procedures for equipment interconnecting distributed energy resources with electric power systems and associated interfaces;
  - (3) ANSI C84.1-2020, electric power systems and equipment voltage ratings (60 Hertz);
- (4) IEEE Std 1547.2<sup>TM</sup>-2008<sup>TM</sup>, application guide for IEEE 1547 standard for interconnecting distributed resources with electric power systems;
- (5) IEEE Std 1547.6<sup>TM</sup>-2011<sup>TM</sup>, IEEE recommended practice for interconnecting distributed resources with electric power systems distribution secondary networks;
- (6) IEEE Std 1547.7<sup>™</sup>-2013<sup>™</sup>, IEEE guide for conducting distribution impact studies for distributed resource interconnection;
- (7) IEEE C62,92.6™-2017 IEEE Guide for Application of Neutral Grounding in Electrical Utility Systems, Part VI Systems Supplied by Current Regulated Sources;
- (8) UL 1741, Edition 3, September 28, 2021 Inverters, Converters, Controllers and Interconnection System Equipment for Use with Distributed Energy Resources.
  - (9) NFPA 70, current version, National Electrical Code, including any NM or local
  - (10) IEEE C2, current version, National Electrical Safety Code, including any NM or local
- (11) UL 1741 Certification Requirement Decision for Power Control Systems, March 8, 2019, Inverters, Converters, Controllers and Interconnection System Equipment for Use With Distributed Energy Resources.
- C. The interconnection equipment shall be considered certified for interconnected operation if the equipment package has been tested and listed by a nationally recognized testing and certification laboratory (NRTL) for continuous interactive operation with a utility grid.

  [17.9.568.10 NMAC Rp, 17.9.568.10 NMAC, xx/xx/2022]

#### 17.9.568.11 IEEE 1547-2018 ADOPTION

modifications;

modifications;

- A. Capability for the following three grid support functions provided by IEEE 1547 2018 shall be required for all DER installed after March 28, 2023.
  - (1) Shall be capable of actively regulating voltage.
- (2) Shall be capable of frequency response. Frequency response is the capability to modulate power output as a function of frequency.
  - (3) Shall ride-through abnormal voltage/frequency.
- (4) In addition, capability for a fourth grid support function shall be optional: may provide inertial response. Inertial response is the capability for DERs to modulate active power in proportion to the rate of change of frequency.
- A. Beginning on March 28, 2023 (or another date set by Commission order), generating facilities shall be required to comply with IEEE 1547-2018, and shall conform with the following minimum requirements.
- (1) Abnormal performance requirements: Category III ride through capabilities must be supported for inverter-based generating facilities. Rotating generating facilities must meet category I ride-through capabilities.

- (2) Normal performance requirements: Inverter-based generating facilities shall meet reactive power requirements with category B. Rotating generating facilities must meet category A.
- B. Each utility shall post its preferred default settings in their public facing Technical Interconnection and Interoperability Requirements (TIIR) document. As applicable the following shall be identified in the TIIR documents:
  - (1) Voltage and frequency trip settings;
  - (2) Frequency droop settings;
  - (3) Activated reactive power control function and default settings;
  - (4) Voltage active power (volt-watt) mode activation and default settings;
  - (5) Communication protocols and ports requirements.
- C. TIIR documents shall be created through a technical advisory group process and submitted to the Commission for approval. Subsequent changes to TIIR documents shall also be submitted to the Commission for approval.
- **DB.** While capabilities for functions one and two are mandatory, their utilization is at the discretion of the area electric utility. For function three, when determining ride through requirements, the utility shall specify which of abnormal operating performance is required. This may be subject to regulatory requirements that are outside the scope of this standard and may consider DER type, application purpose, future regional DER penetration, and the area characteristics.
- **EC.** The utility shall notify the DER owner of the need to modify ride through settings. The request for setting modification shall not exceed one per year.
- **FD.** Existing inverters are not required to conform to the standards adopted above in Subsection A., but upon replacement due to end of life cycle or other reasons, must be replaced with advanced inverters.
- **GE.** Replacement of existing inverters with those that conform to the standards adopted above in subsection A. will not be considered a major modification of operations, so long as the total output of the generating facility, or its export limits as previously approved remain unchanged.

  [17.9.568.11 NMAC Rp, 17.9.568.11 NMAC, xx/xx/2022]

#### 17.9.568.12 DETERMINATION OF EXPORT CAPACITY STATUS

- A. Export Controls: If a DER uses any configuration or operating mode in Ssubsection C<sub>7</sub> to limit the export of electrical power across the point of interconnection, then the export capacity shall be only the amount of power capable of being exported (not including any inadvertent export). To prevent impacts on system safety and reliability, any inadvertent export from a DER must comply with the limits identified in this section. The export capacity specified by the interconnection customer in the interconnection application will be documented as the maximum allowed export capacity of the DER in the interconnection agreement.
- **B.** An <u>interconnection</u> application proposing to use a configuration or operating mode to limit the export of electrical power across the point of interconnection shall include proposed control and/or protection settings.
  - **C.** Acceptable export control methods:
    - (1) Export control methods for non-exporting DER
- a. Reverse power protection (<u>Device 32R</u>): <u>\*To limit export of power across the point of interconnection</u>, a reverse power protective function is implemented using a utility grade protective relay. The default setting for this protective function shall be 0.1 percent (export) of the service transformer's nominal base nameplate rating, with a maximum 2.0 second time delay to limit inadvertent export.
- **b.** Minimum power protection (<u>Device 32F</u>): <u>\*To limit export of power across the point of interconnection, a minimum import protective function is implemented utilizing a utility grade protective relay. The default setting for this protective function shall be five percent (import) of the generating unit's total nameplate capacity, with a maximum two second time delay to limit inadvertent export.</u>
- c. Relative distributed energy resource rating: \*This option requires the DER facility's nameplate capacity to be no greater than 50 percent of the interconnection customer's verifiable minimum host load during DER operating hours over the past 12 months. This option is not available for interconnections to area networks or spot networks.
  - (2) Export control methods for limited export DER
- a. Directional power protection (<u>Device 32</u>): <u>tTo limit export of power across the point of interconnection, a directional power protective function is implemented using a utility grade protective relay. The default setting for this protective function shall be the export capacity value, with a maximum 2.0 second time delay to limit inadvertent export.</u>

- b. Configured power rating: aA reduced output power rating utilizing the power rating configuration setting may be used to ensure the DER does not generate power beyond a certain value lower than the nameplate capacity. The configuration setting corresponds to the active or apparent power ratings in Table 28 of IEEE Std 1547-2018, as described in subclause 10.4. A local DER communication interface is not required to utilize the configuration setting if it can be set by other certified means. The reduced power rating may be indicated by means of a nameplate rating replacement or, a supplemental adhesive nameplate de-rating tag to indicate the reduced nameplate rating power output capacity. The customer must also provide or a signed attestation from the customer confirming the reduced power output capacity. This method must be certified to IEEE 1547.1-2020. Use of a configured power rating not applied to individual power conversion unit(s) shall require evaluation under mutually agreed-upon means.
  - (3) Export control methods for non-exporting DER or limited export DER;

    a. eCertified power control systems: DER facilities may use certified power control systems to limit export. DER facilities utilizing this option must use a power control system and inverter certified per UL 1741 by a nationally recognized testing laboratory (NRTL) with a maximum open loop response time of no more than 30 seconds. NRTL testing to the UL power control system certification requirements decision shall be accepted until similar test procedures for power control systems are included in a standard. This option is not available for interconnections to area networks or spot networks.
- 4 b. Agreed-upon means: DER facilities may be designed with other control systems and/or protective functions to limit export and inadvertent export if mutual agreement is reached with the distribution provider. The limits may be based on technical limitations of the interconnection customer's equipment or the electric distribution system equipment. To ensure inadvertent export remains within mutually agreed-upon limits, the interconnection customer may use an uncertified power control system, an internal transfer relay, energy management system, or other customer facility hardware or software if approved by the distribution provider. [17.9.568.12 NMAC Rp, 17.9.568.12 NMAC, xx/xx/2022]

### 17.9.568.13 APPLICATION REVIEW PROCESS: These interconnection procedures are applicable to all state jurisdictional interconnections of generating facilities, including energy storage devices.

- A. All electrical sources, including storage, that operate in parallel with the utility electric power system are required to have an interconnection review and an interconnection agreement to ensure safety, system reliability, and operational compatibility. When a storage system is installed as part of a generating facility, both may be reviewed at the same time and be included in one interconnection agreement. There are four interconnection review paths:
- (1) Simplified Process. For certified inverter-based generating facilities that have a nameplate rating that does not exceed 50 kilowatts (kW) and an export capacity that does not exceed 25 kilowatts (kW).
- (2) **Fast Track Process.** For generating facilities that have a nameplate rating of up to 5 megawatts (MW), depending on the line capacity and distance from the substation. To qualify for fast track, the generating facility's export capacity shall not exceed the limits identified in the table below, which vary according to the voltage of the line at the proposed point of interconnection. Generating facilities located within 2.5 miles of a substation and on a main distribution line with minimum 600-amp capacity are eligible for the fast track process under higher thresholds. For purposes of the table below, a mainline is the three-phase backbone of a circuit. It will typically constitute lines with wire sizes of 4/0 American wire gauge, 336.4 kcmil, 397.5 kcmil, 477 kcmil and 795 kcmil.

Line Voltage	Export Capacity for Fast Track Eligibility	
	Regardless	On $> 600$ amp line and $< 2.5$ miles
	of location	from substation
<u>5 kV</u>	< 500 kW	< 500 kW
5 kV - 14 kV	< 2 MW	< 3 MW
15  kV - 30  kV	< 3 MW	< 4 MW
31  kV - 69  kV	< 4 MW	< 5 MW

(3) **Detailed Study Process.** For all generating facilities with a rated capacity 10 megawatts (MW) or less that do not qualify, or pass through, the simplified or fast track processes or subsequent supplemental review.

- (4) Case Specific Review Process. Generating facilities with a rated capacity greater than 10 megawatts (MW) shall be reviewed pursuant to 17.9.569 NMAC.
- **B.** The interconnection screening process will proceed according to capacity levels, as defined by the generating facility's nameplate rating. For the case of a generating facility that includes energy storage, the nameplate capacity is determined by status as non-exporting and limited exporting systems as described in Section 17.9.568.12 NMAC Application submittal. The interconnection applicant shall submit an interconnection application (see Appendices 1A, 1B or 1C, as appropriate) to the utility, together with the applicable processing fee identified in section 17.9.568.23 NMAC. The application shall be date and time-stamped upon receipt for the purposes of any timetable in these procedures.
- (1) The interconnection applicant shall submit its interconnection request (application) to the utility, together with the applicable processing fee. The request shall be date and time-stamped upon receipt for the purposes of any timetable in these procedures.
- C. (2)Completeness review. Utility shall provide a notification notify the interconnection applicant, via email or other means, to that the interconnection-customer application has been received within three business days of receipt of the interconnection request, application. Within 10 business days of receipt, the utility shall notify the applicant which notice shall state whether the interconnection request application is deemed complete and valid. If the application is incomplete, the utility shall provide the applicant with a list of all information that the applicant must provide to complete the application. The applicant must provide the requested information within 10 business days, or the application will be deemed withdrawn.
- (3) Any modification to equipment configuration or to the interconnection site not agreed to by the utility and the applicant may be deemed a withdrawal of the application, unless the parties are in communication about the modifications and the parties agree to a reasonable time frame to cure any problems that may be caused by the modification.
- D. **Interconnection Queue Position and Posting**. The utility shall assign the interconnection application a queue position based on when it is received under 17.9.568.13 subsection C NMAC.
- (1) The utility shall maintain a single queue, which may be sortable by geographic region (e.g., feeder or substation).
- (2) The queue position of each interconnection application will be used to determine the cost responsibility for the upgrades necessary to accommodate the interconnection.
  - (3) The queue shall contain all of the information listed in Attachment XX.
  - (3) The queue shall be publicly available on the utility's website and shall be updated at least
- (4) If an application fails the screening process under the simplified or fast track process, but the applicant decides to continue with review (including Supplemental review) under another level, the applicant shall retain its original queue position.
- (5) If an interconnection application fails the screening process under the simplified or fast track process, but the applicant decides to continue with review (including supplemental review) under another level, the applicant shall retain its original queue position.

#### **E. Modifications to Generating Facility.**

monthly.

- (1) At any time after an interconnection application is deemed complete or an interconnection agreement has been signed, if the applicant wishes to make modifications to the planned generating facility it shall submit to the utility, in writing, all proposed modifications to any information provided in the interconnection application or in the interconnection agreement. Any modification to machine data, equipment configuration, or to the interconnection site of the generating facility not agreed to in writing by the utility and the interconnection customer may be deemed a withdrawal of the interconnection application.
- (2) Within 10 business days of receipt of a proposed modification, the utility shall notify the applicant whether a proposed modification to either an interconnection application or an existing generating facility constitutes a material modification.
- (a) If the utility determines the proposed modification is a material modification, then the utility shall notify the interconnection customer in writing that the customer may: 1) withdraw the proposed modification; or 2) proceed with a new interconnection application for such modification. The interconnection customer shall provide its determination in writing to the utility within 10 business days after being provided the material modification determination results. If the interconnection customer does not provide its determination, the proposed modification shall be deemed withdrawn.
- (b) If the proposed modification is determined not to be a material modification, then the utility shall notify the interconnection customer in writing that the modification has been accepted and that the

customer shall retain its eligibility for interconnection, including its place in the interconnection queue. Existing generating facilities may make the modification without requiring a new interconnection application.

- (3) Any dispute as to the utility's determination that a modification constitutes a material modification shall proceed in accordance with the dispute resolution provisions in 17.9.568.26 NMAC.
- (4) Any modification to machine data, equipment configuration, or to the interconnection site of the generating facility not agreed to in writing by the utility and the interconnection customer may be deemed a withdrawal of the interconnection application and may require submission of a new interconnection application, unless proper notifications of each party by the other as described in 19.9.568.13 subsections E.1 and E.2 NMAC.
- F. (4)Site Control. Documentation of site control must be submitted with the interconnection request. Site control may be demonstrated by:
- a.(1) Ownership of, or a leasehold interest in, or a right to develop a site for the purpose of constructing a generating facility;
  - b<sub>-</sub>(2) An fully executed option to purchase or acquire a leasehold site for such purpose; or
- **e.(3)** An <u>fully executed agreement demonstrating</u> exclusivity or other business relationship between the interconnection applicant and the entity having the <u>rightauthority</u> to grant the applicant the right to possess or occupy a site for such purpose.

[17.9.568.13 NMAC - Rp, 17.9.568.13 NMAC, xx/xx/2022]

**17.9.568.14 OPTIONAL PRE-APPLICATION REPORT:** Potential applicants may request this optional report <u>for a specific site</u> to get information about system conditions at their proposed point of interconnection without submitting a full interconnection application.

- **A.** Potential applicants shall provide the following information to the utility to expedite its preapplication review:
  - (1) Project contact information including name, address, phone number, and email address;
  - (2) Project location (street address with nearby cross streets, and town/city);
- (3) Meter number, pole number, or other equivalent information (such as latitude and longitude coordinates) identifying the potential Point of Interconnection, if available;
- (4) Generator type (i.e., solar, wind, combined heat and power) and whether energy storage will be collocated with the generation;
  - (5) Nameplate capacity (in alternating current kW);
  - (6) Single or three phase generator configuration;
  - (7) Stand-alone generator with no on-site load (yes or no?);
- (8) <u>IsWhether</u> new service <u>is</u> requested. (yes or no?) If there is existing service, include the customer account number, site minimum and maximum existing or proposed maximum loads in kW and specify if the amount of any anticipated additional load the load is expected to change.
- **B.** The pre-application report shall be completed by the utility per the schedule in Subsection F of this section and include the following information, if available:
- (1) Total capacity (MW) of substation/area bus or bank and circuit likely to serve proposed site. If substation and/or circuit planned capacity limits are less than the total capacity the utility shall indicate the planned capacity limits.
- (2) Aggregate existing generating export capacity (MW) interconnected to the substation/area bus or bank and circuit likely to serve proposed site.
- (3) Aggregate queued generating export capacity (MW) proposing to interconnect to the substation/area bus or bank and circuit likely to serve proposed site.
- (4) Available capacity (MW) of substation/area bus or bank and circuit likely to serve proposed site. Available capacity is the total capacity less the sum of existing and queued generating export capacity, accounting for all load served by existing and queued generators. Note: generators may remove available capacity in excess of their generating capacity if they serve on site load and utilize export controls which limit their generating capacity to less than their nameplate rating.
  - (5) Whether the proposed generating facility is located on an area, spot or radial network.
  - (6) Nominal distribution circuit voltage at the proposed site.
  - (7) Approximate circuit distance between the proposed site and the substation.
- (8) Relevant line section(s) and substation actual or estimated peak load and minimum load data, when available.
- (9) Number Manufacturer model number/type and rating of protective devices and number and type of voltage regulating devices between the proposed site and the substation/area.

- (10) Whether or not three-phase power is available at the site or distance from three-phase service.
- (11) Limiting conductor rating from proposed point of interconnection to distribution substation.
- (12) Based on proposed point of interconnection, existing or known constraints such as, but not limited to, electrical dependencies at that location, short circuit interrupting capacity issues, power quality or stability issues on the circuit, capacity constraints, or secondary networks.
  - (13) Any other information the utility deems relevant to the interconnection application.
- C. The pre-application report need only include pre-existing data. A pre-application report request does not obligate the utility to conduct a study or other analysis of the proposed project if that data is not available. If the utility cannot complete all or some of a pre-application report due to lack of available data, the utility will provide the potential applicant with a pre-application report that includes the information that is available and identify the information that is unavailable.
- **D.** Notwithstanding any of the provisions of this section, the utility shall, in good faith, provide preapplication report data that represents the best available information at the time of reporting.
- E. Costs of pre-application reports. Pre-application reports for front of the meter and behind the meter interconnections should be treated differently: The party requesting the pre-application report shall pay
- (1) Pre application reports for front of the meter interconnections: \$500.00. However, if a utility can provide documentation that the cost is higher, then they would be paid that additional amount.
- (2) Pre application reports for behind the meter interconnections: \$300.00 for up to one MW system size, and \$500.00 for over one MW. If a utility can provide documentation that the cost is higher, then they the requesting party shall pay would be paid that additional amount.
- F. Time frames for pre-application reports. Pre-application reports for front of the meter and behind the meter interconnections should be treated differently:
- (1) Pre application reports for front of the meter interconnections should be completed in 30 business days. However, if it can be documented that a utility cannot meet this deadline due to circumstances beyond their control, then they would be given more time.
- (2) Pre application reports for behind the meter interconnections should be completed in 20 business days for system sizes up to one MW, and 30 business days for system sizes greater than one MW, from the receipt of the completed request form and payment of the fee. If it can be documented that a utility cannot meet this deadline due to circumstances beyond their control, then the utility will be given more time but must notify the applicant.
- **G.** Length of time for accuracy of information. Due to the dynamic nature of the distribution electric power system, accuracy cannot be guaranteed past the time of completion of a report. The preapplication report shall be non-binding on the utility and shall not confer any rights to the interconnection customer. The provided information does not guarantee that an interconnection may be completed.

  [17.9.568.14 NMAC Rp, 17.9.568.14 NMAC, xx/xx/2022]

#### 17.9.568.15 <u>INTERCONNECTION REVIEWSIMPLIFIED PROCESS</u>:

A. This review process allows for rapid approval for the interconnection of those generating facilities that do not require an interconnection study. The review process includes a screening by the utility to determine if a supplemental review is required.

#### (1) Description of general review path:

**a.** Level one: simplified interconnection - for certified inverter-based generating facilities with a power rating of 25 kilowatts (kW);

b. Level two: fast track with or without supplemental review—for certified generating facilities that pass certain specified screens and likely would have a power rating of 2.0 megawatts (MW) or less, or

c. Level three: full interconnection study—for generating facilities that have a power rating of 10 megawatts (MW) or less and do not qualify for the simplified or fast track process.

**d.** Generating facilities with a rated capacity greater than 10 megawatts (MW) shall be conducted pursuant to 17.9.569 NMAC.

(2) Upon receipt of a complete and valid interconnection request, utility shall perform initial review if the generating facility qualifies for the fast track process. The initial review determines if:

the generating facility may be interconnected safely and reliably; or

b. the generating facility requires a supplemental review.

	Utilities shall use the following screen criteria, as applicable, to evaluate interconnection
applications (detailed in Att	
ŧ	Screen one: Is the point of common coupling on a network system?
Į.	Screen two: Is the interconnection facility equipment certified for the
application?	
•	Screen three: Is the aggregate generating facility capacity on the line section less
than 100 percent of minimu	m daytime load?
•	I. Screen four: For single phase interconnections only is the aggregate
generation capacity on the s	shared secondary, including the proposed generating facility, less than 65 percent of the
nameplate rating of the serv	<del>ice transformer?</del>
•	Screen five: For single phase interconnections only is the imbalance between
the two sides of the 240 vol	t service less than 20 percent of the nameplate rating of the service transformer?
4	Screen six: Does the facility use a certified inverter with a capacity rating of 25
kW or less?	
<u> </u>	Screen seven: Is the starting voltage dip less than five percent and have the
flicker requirements of IEE	
	Absent extraordinary circumstances, for projects proceeding under level one, the utility
shall notify applicant in wri	ting of the results of initial review within seven business days following validation of an
	r projects proceeding under level two, the utility shall notify applicant in writing of the
	within 15 business days following validation of an interconnection request.
	For all interconnection requests that pass initial review and do not require interconnection
	grades, utility shall provide applicant with a small generator interconnection agreement
	providing notice of initial review results. For interconnection requests that fail initial
	provider determines the interconnection request can be approved with minor
	all provide applicant with a non-binding cost estimate of the minor modifications and a
	tion agreement within five business days of providing notice of initial review results.
	For interconnection requests that fail initial review, utility shall provide the technical
	pporting the initial review results in writing (including detail about the specific system
	ing the interconnection applicant to fail the screen). The utility shall provide the
	er attend a customer options meeting or proceed directly to supplemental review. The
applicant must notify the ut	ility of its selection within 10 business days or the application will be deemed
withdrawn.	
	The utility shall not impose arbitrary limitations on interconnection (i.e., limiting
interconnection to projects l	less than 50 percent of the circuit's rated capacity) without a valid technical reason. In
providing detail about the sp	pecific system threshold or limitation causing the interconnection applicant to fail the
screen, the utility shall prov	ride an estimate of the cost of and expected timeline for conducting necessary upgrades to
accommodate the interconn	ection request.
A. <b>Applicati</b>	ion. An interconnection customer must submit an interconnection application, pursuant
	.13 NMAC, using the standard simplified interconnection application form provided in
	e sent electronically to a recipient designated by the utility. The application fee specified
	ection A NMAC shall be submitted along with the application. An interconnection
	lard interconnection agreement for the simplified process by submitting a simplified
process application.	mar interconnection agreement for the simplified process by submitting a simplified
	e - simplified interconnection process: generating facilities with nameplate capacity up
	For fast track processing without the need for further review. Facilities that combine
	age that are limited to 25 kW of export capacity shall also be eligible for fast track
	has documented that the aggregated export capacity on the line segment has exceeded or
	the line's estimated daytime minimum load as a result of interconnection.
	d Screening. The utility shall evaluate the interconnection application using the
following simplified screen	
	Screen 1: The generating facility must utilize a UL 1741 certified inverter.
	Screen 2: For interconnection of a proposed generating facility to the load side of
	bosed generating facility must utilize an inverter-based equipment package and, its
	with the nameplate rating of the aggregated other inverter-based generation, shall not
exceed 50 percent of the sec	condary network's relevant minimum load.

- (3) Screen 3: Until December 31, 2023, for interconnection of a proposed generating facility to a radial distribution circuit, the aggregate export capacity of the generating facilities connected to the distribution circuit, including the proposed generating facility, may not exceed 100 percent of the relevant minimum load (or 15 percent of maximum load if minimum load data is unavailable) normally supplied by the distribution circuit. After December 31, 2023, for interconnection of a proposed generating facility to a radial distribution circuit, the aggregate export capacity of the generating facilities connected to the distribution circuit, including the proposed generating facility, may not exceed 100 percent of the relevant minimum load normally supplied by the distribution circuit.
- (4) **Screen 4**: If the proposed generating facility is to be interconnected on a single-phase shared secondary, the aggregate export capacity generation capacity on the shared secondary, including the proposed generating facility, shall not exceed 65 percent of the transformer nameplate power rating.
- (5) Screen 5: If the proposed generating facility is single-phase and is to be interconnected on a center tap neutral of a 120/240 volt service, its addition shall not create an imbalance between the two sides of the 240 volt service of more than 20 percent of the nameplate rating of the service transformer.
- C. Level Two fast track with or without supplemental study: inverter based generating facilities with an export capacity within the limits identified in the table below are eligible for level two/fast track process.

Line Voltage	Export Capacity for Fast Track Eligibility	
	Regardless	On > 600 amp line and < 2.5 miles
	of location	from substation
<del>5 kV</del>	< 500 k₩	< 500 k₩
5 kV 14 kV	< 2 M₩	<3 M₩
15 kV 30 kV	< 3 M₩	<4 MW
31 kV 69 kV	<4 MW	<5 M₩

- C. Simplified Screening Results. Within seven business days after the utility notifies the applicant that its interconnection application is complete, the utility shall notify the customer whether the generating facility meets the simplified process screens and include with the notification copies of the analysis and data underlying the utility's determinations under the screens. Despite the failure of one or more screens, the utility, at its sole option, may approve the interconnection provided such approval is consistent with safety and reliability.
- Failed Screens. If the utility cannot determine that the generating facility may nevertheless be interconnected consistent with safety, reliability, and power quality standards, the utility shall provide the applicant the screen results. If one or more screens are not passed, the utility shall provide, in writing, the specific screens that the interconnection application failed, including the technical reason for failure. The utility shall provide information and detail about the specific system threshold or limitation causing the interconnection application to fail the screen. In addition, the utility shall allow the customer to select one of the following, at the Applicant's option: (a.) Undergo supplemental review in accordance with section 17.9.568.17 NMAC; or (b.) Continue evaluating the interconnection application under detailed study in accordance with section 17.9.568.18 NMAC. The applicant must notify the utility of its selection within 10 business days or the interconnection application will be deemed withdrawn.
- (2) Approval. If the proposed generating facility passes the screens, or the utility determines the proposed generating facility can be interconnected safely and reliably despite the failure of one or more screens, the interconnection application shall be approved. The utility shall return to the applicant an executed simplified process interconnection agreement at the same time it provides the applicant with the screen results. If the utility determines that the generating facility can be interconnected safely and reliably, but requires construction of interconnection facilities or distribution system modifications, the utility shall instead process the interconnection application according to the procedures for the fast track process starting at section 17.9.568.16 NMAC.
  - D. Reference Point of Applicability Review
- (1) The following process will occur concurrently with the simplified process screening in 568.15(B) and (C). Within five business days after the utility notifies the applicant that the interconnection application is complete, the utility shall review the reference point of applicability denoted by the applicant and determine if it is appropriate.
- (2) If it is determined that the reference point of applicability is appropriate, the utility will notify the applicant when it provides the simplified screen results and proceed according to section C

above.

- (3) If the utility determines the reference point of applicability is inappropriate, the utility will notify the applicant in writing, including an explanation as to why it requires correction. Applicant shall provide the utility with a corrected interconnection application with the proper reference point of applicability within five business days of notification. During this time the utility will proceed with applying the simplified screens. The utility shall review the revised interconnection request within five business days of receipt to determine if the revised reference point of applicability has been appropriately denoted. If correct, the utility will proceed according to sections C above but be provided with a total of 12 business days to provide the simplified results. If the interconnection customer does not provide the appropriate reference point of applicability or a request for an extension of time within the deadline, the interconnection application will be deemed withdrawn.
- D. Customer options meeting: Within ten business days of the utility's completion of its initial review, the utility shall offer to convene a customer options meeting with the applicant to review possible interconnection customer facility modifications or the screen analysis and related results to determine what further steps are needed to permit the generating facility to be connected safely and reliably. At the time of notification of the utility's determination, or at the customer options meeting, the utility shall:
- (1) Offer to perform facility modifications or minor modifications to the utility's electric system (e.g., changing meters, fuses, relay settings) and provide a non-binding good faith estimate of the limited cost to make such modifications to the utility's electric system and offer to continue the screening process; or
- (2) Offer to perform a supplemental review if the utility concludes that the supplemental review might determine that the generating facility could continue to qualify for interconnection pursuant to the fast track process, and provide a non-binding good faith estimate of the costs and time of such review; or
- (3) Offer to continue evaluating the interconnection application under the full interconnection study process.
- E. Supplemental review. If an applicant requests supplemental review and submits a nonrefundable supplemental review fee, if required, the utility shall complete supplemental review within 20 business days, absent extraordinary circumstances, following authorization and receipt of the fee. Supplemental review determines if:
  - (1) the generating facility may be interconnected safely and reliably, or
  - (2) the generating facility requires detailed study.

#### F. Detailed study process

- (1) If the utility determines the application cannot be approved without evaluation under the detailed study process, at the time the utility notifies the applicant of either the initial review or supplemental review results, the utility shall provide the applicant the options of proceeding to detailed study or of participating in scoping meeting, the applicant shall notify the utility in writing that it requests a scoping meeting or that it would like to proceed to detailed study within 15 business days of the utility's notification, or the application shall be deemed withdrawn. If the applicant requests a scoping meeting, the utility shall offer to convene a meeting at a mutually agreeable time within 10 business days of the applicant's request. The scoping meeting may be omitted by mutual agreement.
- (2) The utility shall complete and issue a final interconnection system impact study and facilities review report within 30 business days after the execution of a detailed study agreement.

#### G. System impact study

- (1) The utility shall provide the interconnection customer, no later than five business days after the scoping meeting or five business days after the interconnection request is deemed complete or after the final step in the Fast Track review process if scoping meeting is waived, a system impact study agreement including an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the study.
  - (2) A system impact study would typically include:
    - a. Load flow study
    - b. Short-circuit study
    - e. Circuit protection and coordination study
    - d. Impact on system operation
    - e. Stability study and the conditions that would justify including this element in the

system impact study

- **f.** Voltage Collapse Study and the conditions that would justify including this element in the System Impact Study).
- (3) In order to remain under consideration for interconnection, the interconnection customer must return executed system impact study agreements, if applicable, within 30 business days.

(4) A system impact study shall be completed, and the detailed results transmitted to the
interconnection customer within 30 business days after the execution of a system impact study agreement. A
transmission system impact study, if required, shall be completed and the results transmitted to the interconnection
customer within 45 business days after the execution of a system impact study agreement, or in accordance with the
utility or area electric power system queuing procedures.
H. Facilities Study
(1) The utility shall provide the interconnection customer, no later than five business days
after the completion of a system impact study, a facilities study agreement, including an outline of the scope of the
study and a non-binding good faith estimate of the cost to perform the facilities study.
(2) In order to remain under consideration for interconnection, or, as appropriate, in the
transmission provider's interconnection queue, the interconnection customer must return the executed facilities study
agreement or a request for an extension of time within 30 business days.
(3) In cases where upgrades are required, the facilities study must be completed within 45
business days of the receipt of the agreement. The facilities study report must include a good faith estimate of the
costs of interconnections upgrades, a timeline for the utility to commence work on the upgrades, and a reasonable
estimate of the completion date.
a. If the interconnection customer believes that all or a portion of the cost of
upgrades would qualify as a public benefit, it may petition the commission for a determination of the eligibility for
cost sharing under provisions of Section 17.9.568.21 NMAC. The commission will refer the petition to utilities
staff, who will provide a recommendation within 30 days on whether to accept the petition and open a proceeding to
review the project.
(4) In cases where no upgrades are necessary, and the required facilities are limited to
interconnection facilities, the facilities study must be completed within 30 business days.
(5) Upon completion of the facilities study, and with the agreement of the interconnection
customer to pay for interconnection facilities and upgrades identified in the facilities study, or a determination by the
commission for application of cost sharing, the distribution provider shall provide the interconnection customer an
executable interconnection agreement within five business days.
I. Level Three: For front of the meter generating facilities of two MW or greater, but less than 10
MW, the following study process shall be used:
(1) Scoping meeting: A scoping meeting will be held within 10 business days after the
interconnection request is deemed complete. The utility and the applicant will bring to the meeting personnel,
including system engineers and other resources that might be reasonably required to accomplish the purpose of the
meeting.
a. The purpose of the scoping meeting is to discuss the interconnection request and
review existing studies relevant to the request. The parties shall discuss whether to perform a feasibility study or to
proceed directly to a system impact study.
<b>b.</b> If the parties agree that a feasibility study should be performed, the utility shall
provide the applicant within 5 days an outline of the scope of the study and a non-binding, good-faith estimate of the
cost to perform the study.
c. The applicant must return an executed feasibility study agreement within 15
days.
d. If the parties agree not to perform a feasibility study, the utility shall provide the
applicant within five business days after the scoping meeting a system impact study agreement and a non-binding,
good faith estimate of the cost to perform the study.
e. The scoping meeting may be omitted by mutual consent, if the applicant directly
requests a feasibility study.
(2) Feasibility study: A feasibility study shall identify any potential adverse system impacts
that would result from interconnection of the generating facility
a. A deposit of the lesser of 50 percent of the good faith estimated feasibility study
cost, or earnest money of \$1,000.00 may be required by the utility.
<b>b.</b> If the feasibility study shows no potential for adverse system impacts, the utility
shall send the applicant a facilities study agreement, including an outline of the scope of the study and a non-
binding, good faith estimate of the cost to perform the study.
e. If no additional facilities are required, the utility shall provide the applicant an
executable interconnection agreement within five business days.
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(3)	System impact study: A system impact study shall identify and detail the electric system
the state of the s	f the proposed generating facility were interconnected without project modifications or
	ns. A system impact study shall evaluate the impact of the proposed generating facility
on the reliability of the elec	etric system.
· · · · · · · · · · · · · · · · · · ·	<b>b.</b> If the system impact study indicates adverse impacts on either the transmission
system or the distribution s	ystem, within five business days, the utility shall provide the applicant with a system
	atlining the scope of the study and a non-binding good faith estimate of the costs of
performing the study.	
	c. In order to remain under consideration for interconnection, the applicant must
•	impact agreements and a deposit for the good faith estimates of the studies within 30
<del>business days.</del>	
	d. If the feasibility study shows no potential for adverse impacts on either the
	systems, the utility shall send the applicant a facilities study agreement, including an
	study and a non-binding, good faith estimate of the cost to perform the study, or an
executable interconnection	
	e. Where the transmission systems and distribution systems have separate owners,
	mission dependent utilities, the interconnection applicant may apply to the relevant
	quest project coordination. Affected systems shall participate in the study and provide all
	repare the system impact study.
	Facilities study:
	a. Once the required system impact study/studies are completed, a system impact
	d transmitted to the applicant along with a facilities study agreement within five business
<del>days.</del>	h The according to the Hammide on condition and man binding and faith
	b. The report and agreement shall provide an outline and non-binding, good faith
estimate of the cost of the f	
the studies, within 30 busin	es agreement, or a request for an extension, and a deposit for the good-faith estimates of
	d. Design for any required interconnection facilities and/or upgrades shall be
	ies study agreement. The utility may contract with consultants to perform activities
required under the study ag	
	e. The interconnection customer and the utility may agree to allow the applicant to
	some of the interconnection facilities, but the proposed deign will be reviewed subject to
modification by the utility	
	f. Upon completion of the facilities study, and with the agreement of the
	pay for interconnection facilities or upgrades identified in the study, the utility shall
	applicant with an executable interconnection agreement within five business days.
	17.9.568.15 NMAC, xx/xx/2022]
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17.9.568.16 <b>COST S</b>	HARING FORM INTERCONNECTION UPGRADESFAST TRACK PROCESS:
	of utility system modifications required pursuant to the fast track process or the full
	ess shall be borne by the interconnection customer unless otherwise agreed to by the
parties or following a deter	mination by the commission that some or all of the costs constitute system benefits
eligible for cost-sharing op	tions:
<del>(1)</del>	The commission may determine on a case by case basis whether the cost of distribution
system upgrades necessary	to interconnect one or more generating facilities may be eligible for some form of cost-
sharing:	
	(a) among several developers using the same distribution facilities,
	(b) among all ratepayers of the qualifying utility via rate base adjustments, or
	(c) among ratepayers of the same rate class as subscribers to the community solar
facility via a rate rider for t	
<del>(2)</del>	In making such a determination that there are public benefits to such a cost-sharing
mechanism, the commissio	n shall employ the same analysis as provided for cost sharing or rate basing grid
modernization projects as d	lefined by Section 62-8-13 NMSA 1978 (Grid Modernization Act 2019, HB 233) to make
a finding that the approved	expenditures are:

(a) reasonably expect	ed to improve the public utility's electrical system efficiency,
	operations, maintenance and ratepayer costs; and meet energy
demands through a flexible, diversified and distributed	
	ed to increase access to, and use of, clean and renewable
	b low-income subscribers and subscribers in underserved
communities;	
(c) designed to contri	bute to the reduction of air pollution, including greenhouse
gases;	
	such cost sharing of necessary interconnection upgrades shall
not be considered a "subsidization" subject to the three	e percent limitations spelled out in this rule or in the
Community Solar Act.	
	stomer must submit an interconnection application, pursuant
	the standard interconnection application form provided in
	ecipient designated by the utility. The application fee specified
	be submitted along with the interconnection application.
•	shall evaluate the interconnection application using the
following fast track initial review screens.	
	ion of a proposed generating facility to the load side of
	nust utilize a certified inverter-based equipment package and its
	f the aggregated other inverter-based generation, shall not
exceed 50 percent of the secondary network's relevant	
	31, 2023, for interconnection of a proposed generating facility
	pacity of the generating facilities connected to the distribution
	y not exceed 100 percent of the relevant minimum load (or 15
	available) normally supplied by the distribution circuit. After
December 31, 2023, for interconnection of a proposed	
	connected to the distribution circuit, including the proposed
	relevant minimum load normally supplied by the distribution
circuit.	
	ion of a proposed generating facility that can introduce
	the export capacity is greater than 250 kW, the following
	ver change equal to the nameplate rating minus the export
capacity, the change in voltage at the point on the med	
interconnection does not exceed three percent. Voltage	e change will be estimated applying the following formula:
Formula	$(R_{SOURCE} \times \Delta \boldsymbol{P}) - (X_{SOURCE} \times \Delta \boldsymbol{Q})$
Politida	
	$V^2$
Where:	
$\Delta P = (DER \text{ apparent power Na})$	meplate Rating – Export Capacity) $\times$ PF,
$\Delta Q = (DER \text{ apparent power Nameple})$	late Rating – Export Capacity) $\times \sqrt{(1 - PF^2)}$ ,
R <sub>SOURCE</sub> is the grid resista	ance, X <sub>SOURCE</sub> is the grid reactance,
V is the said walk	tage, PF is the power factor
v is the grid void	age, 11 15 the power factor

(4) Screen 4: If the proposed generating facility is to be interconnected on a single-phase shared secondary, the aggregate export capacity on the shared secondary, including the proposed generating facility, shall not exceed 65 percent of the transformer nameplate power rating.

- (5) Screen 5: If the proposed generating facility is single-phase and is to be interconnected on a center tap neutral of a 120/240 volt service, its addition shall not create an imbalance between the two sides of the 240 volt service of more than 20 percent of the nameplate rating of the service transformer.
- (6) Screen 6: The starting voltage dip shall be less than five percent and the flicker requirements of IEEE 1547<sup>TM</sup>-2018 must be met. This screen only applies to generating facilities that start by motoring the generator(s).
- (7) Screen 7: When measured at the primary side (high side) of a dedicated distribution transformer serving a generating facility, the sum of the short circuit current contribution ratios of all generating facilities connected to utility's distribution system circuit that serves the generating facility must be less than or equal to 0.1.
- (8) Screen 8: The generating facility, aggregated with other generation on the distribution circuit, will not cause any distribution protective devices and equipment (including but not limited to substation breakers, fuse cutouts, and line reclosers), or utility customer equipment on the system, to exceed 90 percent of the short circuit interrupting capability; nor is the interconnection proposed for a circuit that already exceeds 90 percent of the short circuit interrupting capability.
- (9) Screen 9: The generating facility complies with the applicable type of interconnection, based on the table below. This screen includes a review of the type of electrical service provided to the interconnecting customer, including line configuration and the transformer connection to limit the potential for creating over-voltages on the utility's electric power system due to a loss of ground during the operating time of any anti-islanding function.

Primary Distribution Line Type	Type of Interconnection to Primary Distribution Line	Result/Criteria
Three-phase, three- wire	If ungrounded on primary or any type on secondary	Pass screen
Three-phase, four-wire	Single-phase line-to-neutral	Pass screen
Three-phase, four- wire or mixed three-wire and	All others	Pass screen for inverter-based generation if the aggregate nameplate rating, including the nameplate rating of the proposed project, is  • ≤ 100% feeder or line section minimum load, or  • if minimum load data is not available: ≤ 30% feeder or line section peak load.
four-wire		<ul> <li>Pass screen for rotating generation if the aggregate nameplate rating, including the nameplate rating of the proposed project, is:</li> <li>≤ 33% of feeder or line section minimum load, or</li> <li>if minimum load data isn't available: ≤ 10% of feeder or line section peak load.</li> </ul>

(10) Screen 10: If the generating facility's point of interconnection is behind a line voltage regulator, the generating facility's export capacity is less than 250 kW.

C. Fast Track Screening Results. Within 15 business days after the utility notifies the applicant that the interconnection application is complete, the utility shall notify the applicant of the initial review results and include with the notification copies of the analysis and data underlying the utility's determinations under the screens. If one or more screens are not passed, the utility shall provide, in writing, the specific screens that the interconnection application failed, including the technical reason for failure. The utility shall provide information and detail about the specific system threshold or limitation causing the interconnection application to fail the screen.

- D. Approval. For all interconnection applications that pass initial review and do not require interconnection facilities or distribution upgrades, utility shall provide applicant with a small generator interconnection agreement within 15three business days of providing notice of initial review results, except where a utility is required to provide notice to the transmission provider as outlined in subsection (1) below. Despite the failure of one or more screens, the utility, at its sole option, may approve the interconnection provided such approval is consistent with safety and reliability. For interconnection applications that fail initial review but the utility determines the interconnection application can be approved with minor modifications, the utility shall provide the applicant with a non-binding cost estimate of the minor modifications and an interconnection agreement within five business days of providing notice of initial review results.
- (1) If a utility's transmission service agreement requires that it notify the transmission provider of interconnections (of any size or beyond a specific threshold as specified in the transmission service agreement), the utility shall provide the notice to the transmission provider immediately after it has applied the fast track screens. If the transmission provider determines that it does not need to conduct a further analysis of transmission system impacts, the utility shall provide the interconnection agreement to the customer within three business days of receiving the transmission provider's determination. If the transmission provider does require further analysis, the utility shall coordinate with the interconnection applicant and the transmission provider to ensure such analysis is conducted in a timely manner. If the transmission provider determines that there are impacts that require upgrades, the utility shall follow the detailed study process in section 17.9.568.18 NMAC for providing the customer with an interconnection agreement.
- E. **Failed Screens.** For interconnection applications that fail initial review, at the time it provides the screen results, the utility shall provide the applicant the option to either attend a customer options meeting or proceed directly to supplemental review. The applicant must notify the utility of its selection within 10 business days or the interconnection application will be deemed withdrawn.
- F. The utility shall use the screens identified above to evaluate the interconnection application and shall not impose arbitrary limitations on interconnection (i.e., limiting interconnection to projects less than 50 percent of the circuit's rated capacity) without a valid technical reason, that is provided to the applicant in writing with an explanation. In providing detail about the specific system threshold or limitation causing the interconnection applicant to fail the screen, the utility shall provide an estimate of the cost of and expected timeline for conducting necessary upgrades to accommodate the interconnection application.
  - G. Reference Point of Applicability Review
- (1) The following process will occur concurrently with the fast track screening process in section 17.9.568.16(C). Within five business days after the utility notifies the applicant that the interconnection application is complete, the utility shall review the reference point of applicability denoted by the applicant and determine if it is appropriate.
- (2) If it is determined that the reference point of applicability is appropriate, the utility will notify the applicant when it provides the fast track screen results and proceed according to sections C through F above.
- (3) If the utility determines the reference point of applicability is inappropriate, the utility will notify the applicant in writing, including an explanation as to why it requires correction. Applicant shall provide the utility with a corrected interconnection application with the proper reference point of applicability within five business days of notification. During this time the utility will proceed with applying the fast track screens. The utility shall review the revised interconnection request within five business days of receipt to determine if the revised reference point of applicability has been appropriately denoted. If correct, the utility will proceed according to sections C through F above. If the applicant does not provide the appropriate reference point of applicability or a request for an extension of time within the deadline, the interconnection application will be deemed withdrawn.
- H. Customer options meeting: Within ten business days of the utility's completion of its initial review, the utility shall offer to convene a customer options meeting with the applicant to review possible interconnection customer facility modifications or the screen analysis and related results to determine what further steps are needed to permit the generating facility to be connected safely and reliably. At the time of notification of the utility's determination, or at the customer options meeting, the utility shall:
- (1) Offer to perform facility modifications or minor modifications to the utility's electric system (e.g., changing meters, fuses, relay settings) and provide a non-binding good faith estimate of the limited cost to make such modifications to the utility's electric system and offer to continue the screening process; or
- (2) Offer to perform a supplemental review if the utility concludes that the supplemental review might determine that the generating facility could continue to qualify for interconnection pursuant to the fast track process, and provide a non-binding good faith estimate of the costs and time of such review; or

(3) Offer to continue evaluating the interconnection application under the full interconnection study process.

[17.9.568.16 NMAC - Rp, 17.9.568.16 NMAC, xx/xx/2022]

#### 17.9.568.17 SUPPLEMENTAL REVIEW

- A, Agreeing to Supplemental Review. To accept the offer of a supplemental review, the applicant shall agree in writing and submit a \$2,500 fee for the review, both within 15 business days of the offer. If the written agreement and deposit have not been received by the utility within that timeframe, the interconnection application shall continue to be evaluated under the detailed study process unless it is withdrawn by the applicant.
- **B. Supplemental Review Screens:** The utility shall evaluate the interconnection application using the following supplemental review screens.
- (1) **Minimum Gross Load Screen:** Where 12 months of line section minimum load data (including onsite load but not station service load served by the proposed generating facility) are available, can be calculated, can be estimated from existing data, or determined from a power flow model, the aggregate export capacity on the line section is less than 100 percent of the gross minimum load for all line sections bounded by automatic sectionalizing devices upstream of the proposed generating facility. If minimum load data is not available, or cannot be calculated, estimated or determined, the utility shall include the reason(s) that it is unable to calculate, estimate or determine minimum load in its supplemental review results notification. After December 31, 2023 utility should have minimum load data for all circuits.
- (a) The type of generation used by the proposed generating facility will be taken into account when calculating, estimating, or determining circuit or line section minimum load relevant for the application of 17.9.568.17 subsection B. Solar photovoltaic (pv) generation systems with no battery storage use daytime minimum load (i.e. 10 a.m. to 4 p.m. for fixed panel systems and 8 a.m. to 6 p.m. for pv systems utilizing tracking systems), while all other generation uses absolute minimum load.
- (b) When this screen is being applied to a generating facility that serves some station service load, only the net injection into the electric system will be considered as part of the aggregate export capacity.
- (c) Utility will not consider as part of the aggregate export capacity generation for purposes of this screen generating facility export capacity known to be already reflected in the minimum load data

  (2) Voltage and Power Quality Screen. In aggregate with existing generation on the line section: (1) the voltage regulation on the line section can be maintained in compliance with relevant requirements under all system conditions; (2) the voltage fluctuation is within acceptable limits as defined by Institute of Electrical and Electronics Engineers (IEEE) Standard 1453, or utility practice similar to IEEE Standard 1453; and (3) the harmonic levels meet IEEE Standard 519 limits. If the generating facility limits export pursuant to section 14.9.568.12, the export capacity instead of nameplate rating must be utilized in any analysis including power flow simulations.
- (3) Safety and Reliability Screen. The location of the proposed generating facility and the aggregate export capacity on the line section do not create impacts to safety or reliability that cannot be adequately addressed without application of the detailed study process. If the generating facility limits export pursuant to section 17.9.568.12 NMAC, the export capacity must be included in any analysis including power flow simulations, except when assessing fault current contribution. To assess fault current contribution, the analysis must use the rated fault current; for example, the customer may provide manufacturer test data (pursuant to the fault current test described in IEEE 1547.1-2020 clause 5.18) showing that the fault current is independent of the nameplate rating. The utility shall give due consideration to the following and other factors in determining potential impacts to safety and reliability in applying this screen.
- (a) Whether the line section has significant minimum loading levels dominated by a small number of customers (e.g., several large commercial customers).
  - (b) Whether the loading along the line section is uniform or even.
- (c) Whether the proposed generating facility is located in close proximity to the substation (i.e., less than 2.5 electrical circuit miles), and whether the line section from the substation to the point of interconnection is a mainline rated for normal and emergency ampacity.
- (d) Whether the proposed generating facility incorporates a time delay function to prevent reconnection of the generator to the system until system voltage and frequency are within normal limits for a prescribed time.

(e) Whether operational flexibility is reduced by the proposed generating facility,
such that transfer of the line section(s) of the generating facility to a neighboring distribution circuit/substation may
trigger overloads or voltage issues.
(f) Whether the proposed generating facility employs equipment or systems
certified by a recognized standards organization to address technical issues such as, but not limited to, islanding,
reverse power flow, or voltage quality.
C. Supplemental Review Screening Results. Within 20 business days of an applicant's election to
undergo supplemental review, the utility shall perform supplemental review using the screens set forth above and
notify the customer of the results.
(1) Failed Screens and Option to Revise Interconnection Application. If the proposed
interconnection fails any of the supplemental review screens, the utility shall specify which screens the
interconnection application failed, including the technical reason for failure, and the data and the analysis supporting
the supplemental review. The utility shall provide information and detail about the specific system threshold or
limitation causing the interconnection application to fail the screen. If the applicant chooses to amend the
interconnection application to address the specific failed screens, the applicant must submit an updated
interconnection application demonstrating the redesign within ten business days after receiving the screen results.
The redesign shall only include changes to address the screen failures or identified upgrades (which could include,
for example, the addition of DC-coupled or AC-coupled energy storage). Increases in export capacity or changes in
point of interconnection are not permitted and shall require the interconnection application to be withdrawn and
resubmitted. The utility will evaluate whether the redesign addresses the screen failure and notify the applicant of
the results of this evaluation within ten business days. This redesign option to mitigate impacts shall only be
available one time during the supplemental review process. If the applicant does not amend or withdraw its
interconnection application within ten business days of receiving results, it shall continue to be evaluated under the
detailed study process consistent with subsection 17.9.568.18 subsection A NMAC below.
(2) Approval.
(a) If the proposed interconnection passes the supplemental screens above and does
not require construction of facilities by the utility on its own system, the interconnection agreement shall be
provided within ten business days after the notification of the supplemental review results unless the provisions in
subsection (d) apply.
(b) If interconnection facilities or minor modifications to the utility's system are
required for the proposed interconnection to pass the supplemental screens above, the interconnection agreement,
along with a non-binding good faith estimate for the interconnection facilities and/or minor modifications, shall be
provided to the applicant within 15 business days after receiving written notification of the supplemental review
results.
(c) If the proposed interconnection would require more than interconnection
facilities or minor modifications to the utility's system to pass the supplemental screens above, the utility shall
notify the applicant, at the same time it notifies the applicant with the supplemental review results, that the
interconnection application shall be evaluated under the detailed study process unless the applicant withdraws its
interconnection application.
(d) If a utility's transmission service agreement requires that it notify the
transmission provider of interconnections (of any size or beyond a specific threshold as specified in the transmission
service agreement), the utility shall provide the notice to the transmission provider immediately after it has applied
the supplemental review screens. If the transmission provider determines that it does not need to conduct a further
analysis of transmission system impacts, the utility shall provide the interconnection agreement to the customer
within three business days of receiving the transmission provider's determination. If the transmission provider does
require further analysis, the utility shall coordinate with the interconnection applicant and the transmission provider
to ensure such analysis is conducted in a timely manner. If the transmission provider determines that there are
impacts that require upgrades, the utility shall follow the detailed study process in section 17.9.568.18 NMAC for
providing the customer with an interconnection agreement.

#### 17.9.568.18 DETAILED STUDY PROCESS

A, Application. An interconnection customer must submit an interconnection application, pursuant to subsection 17.9.568.13 subsection B NMAC, using the interconnection application form for fast track and detailed study provided in Appendix 1C, which may be sent electronically to a recipient designated by the utility. The application fee specified in subsection 17.9.568.23 subsection A NMAC shall be submitted along with the application. An applicant who was unable to proceed through the simplified or fast track process application due to

failure of the screening process may request that the utility treat that existing interconnection application as a new detailed study application.

#### B. Scoping Meeting.

- (1) A scoping meeting will be held within ten business days after the interconnection application is deemed complete., or the applicant agrees to proceed to detailed study after simplified or fast track review or as otherwise mutually agreed to by the parties. By mutual agreement of the parties, the scoping meeting, system impact study or facilities study may be waived. The utility and the applicant will bring to the meeting personnel, including system engineers and other resources as may be reasonably required to accomplish the purpose of the meeting.
- The purpose of the scoping meeting is to discuss the interconnection application, the reference point of applicability, and review existing studies relevant to the interconnection application. The parties shall further discuss whether the utility should perform a feasibility study (at the customer's option) or proceed directly to a system impact study, or a facilities study, or an interconnection agreement. If the parties agree that a feasibility study should be performed, the utility shall provide the applicant, as soon as possible, but not later than five business days after the scoping meeting, a feasibility study agreement (Attachment XX), provided by the utility, including an outline of the scope of the study and a non-binding, good-faith estimate of the cost to perform the study.
- (a) The feasibility study will provide a preliminary review of short circuit currents, including contribution from the proposed generation facility, and coordination and potential overloading of distribution circuit protection devices. If the interconnection applicant agrees to the feasibility study, the interconnection applicant shall provide an executed agreement and a deposit for the estimated costs provided by the Utility. The scope of the feasibility study can be modified by the parties upon mutual agreement.
- (3) In order to remain in consideration for interconnection, an applicant who has requested a feasibility study must return the executed feasibility study agreement and any required deposit within 15 business days. If the parties agree not to perform a feasibility study, the utility shall provide the applicant, no later than five business days after the scoping meeting, a system impact study agreement provided by the utility including an outline of the scope of the study and a non-binding, good faith estimate of the cost to perform the study.
- C. Feasibility Study. A feasibility study shall identify any potential adverse system impacts that would result from interconnection of the generating facility.
- (1) A deposit of the lesser of 50 percent of the good faith estimated feasibility study cost, or earnest money of \$1,000.00 may be required by the utility.
- (2) Once the feasibility study is completed, a feasibility study report shall be prepared and transmitted to the applicant. Barring unusual circumstances, the feasibility study must be completed and the feasibility study report transmitted within 30 business days of the applicant's agreement to conduct a feasibility study.
- (3) If the feasibility study shows no potential for adverse system impacts, but facilities are required, the utility shall send the applicant a facilities study agreement, including an outline of the scope of the study and a non-binding, good faith estimate of the cost to perform the study.
- (4) If no additional facilities are required, the utility shall provide the applicant an executable interconnection agreement within five business days.
- D. System impact Study. A system impact study shall identify and detail the electric system impacts that would result if the proposed generating facility were interconnected without project modifications or electric system modifications. A system impact study shall consist of a short circuit analysis, a stability analysis, a power flow analysis, voltage drop and flicker studies, protection and set point coordination studies, and grounding reviews, as necessary. A system impact study shall state the impact of assumptions upon which it is based, state the results of the analyses, and provide the requirement or potential impediments to providing the requested interconnection service, including a preliminary indication of the cost and length of time that would be necessary to correct any problems identified in those analyses and implement the interconnection. A system impact study shall provide a list of facilities that are required as a result of the interconnection application and non-binding good faith estimates of cost responsibility and time to construct. The system impact study must take into account the proposed generating facility's design and operating characteristics, including but not limited to the proposed operating profile, and study the generating facility according to how it is proposed to be operated. If the generating facility limits export pursuant to section 17.9.568.12 NMAC, the system impact study must use export capacity instead of the nameplate rating, except when assessing fault current contribution. To assess fault current contribution, the system impact study must use the rated fault current; for example, the customer may provide manufacturer test data (pursuant to the fault

current test described in IEEE 1547.1-2020 clause 5.18) showing that the fault current is independent of the nameplate rating. The utility shall provide the applicant a system impact study agreement within 5 business days if (a) a feasibility study is conducted and indicates adverse impacts on either the transmission system or the distribution system, (b) the parties agree at the scoping meeting to proceed directly to a system impact study, (c) the scoping meeting is omitted by mutual agreement, or (d) the simplified process or fast track process has been completed and the applicant has elected to continue with the study process, and a system impact study is required. The system impact study agreement shall include an outline of the scope of the study and a non-binding good- faith estimate of the cost to perform the study. If applicable, the agreement shall list any additional and reasonable technical data on the generating facility needed to perform the system impact study. The scope of and cost responsibilities for a system impact study must be described in the system impact study agreement. A deposit of the good faith estimated costs for each system impact study shall be provided by the applicant when it returns the study agreements. The additional and reasonable technical data, if applicable, shall be returned with the system impact agreement. In order to remain under consideration for interconnection, the applicant must return the executed system impact study agreements and a deposit for the good-faith estimates of the studies within 20 business days. If the feasibility study shows no potential for adverse impacts on either the transmission or distribution systems, (or the parties agree to proceed straight to a facilities study), the utility shall send the applicant a facilities study agreement, including an outline of the scope of the study and a non-binding, good faith estimate of the cost to perform the study, or an executable interconnection agreement, as applicable. A system impact study shall be completed within 40 business days after the system impact study agreement is signed by the parties and delivered with deposit to the utility. The results and, if necessary, facilities study agreement shall be delivered to the applicant within five business days of completion of the system impact study. Upon request, the utility shall provide the applicant supporting documentation and workpapers developed in the preparation of the system impact study. In instances where the system impact study shows potential for transmission system (5) adverse system impacts, within five business days following the identification of such impacts by the utility, the utility shall coordinate with the appropriate transmission provider to have the necessary studies completed to determine if the DER causes any adverse transmission impacts. If the utility's transmission service agreement requires that the transmission provider be notified of an interconnection, it shall provide that notice, regardless of whether the system impact study shows potential for transmission system adverse system impacts, and coordinate with the transmission provider on any studies it may determine are necessary. In order to remain in consideration for interconnection, an applicant must return the executed transmission system impact study agreement within 15 business days of receipt of the agreement. (7) A transmission system impact study, if required, shall be completed and the results transmitted to the applicant in as timely a manner as possible after the transmission system impact study agreement is signed by the parties. The utility shall be responsible for coordination with the transmission provider as needed. Affected systems shall participate in the study and provide all information necessary to prepare the study. A one-time modification of the interconnection application is allowed as a result of information from the system impact study report. (a) If the applicant chooses to amend the interconnection application to address the specific system impacts, the applicant must submit an updated interconnection application demonstrating the redesign within 15 business days after receiving the system impact study results from the utility. The redesign shall only include changes designed to address the specific system impacts or identified upgrades (which could include, for example, the addition of DC-coupled or AC-coupled energy storage). This redesign option to mitigate impacts shall only be available one time during the detailed study process. Increases in export capacity or changes in point of interconnection are not permitted and shall require the interconnection application to be withdrawn and resubmitted. (b) The utility shall notify the interconnecting customer within ten business days of receipt of the modified interconnection application if any additional information is needed. If additional information is needed or document corrections are required, the applicant shall provide the required information or corrections within ten business days from receipt of the utility notice. (c) The actual costs to the utility for any necessary restudies as a result of a modification described above shall be paid by the applicant. Such restudies should be limited to the impacts of the modification and shall be billed to the applicant at cost and not for work previously completed. The utility shall use reasonable efforts to limit the scope of such restudies to what is necessary. The revised impact study shall be

completed within fifteen business days.

E. <b>Facilities Study.</b> Once the required system impact study/studies are completed, a system impact
report shall be prepared and transmitted to the applicant along with a facilities study agreement within five business
<u>days.</u>
(1) The report and agreement shall provide an outline and non-binding, good faith estimate
of the cost of the facilities study.
(2) In order to remain under consideration for interconnection, the applicant must return the
executed facilities agreement, and a deposit for the good-faith estimates of the studies, within 15 business days. The
facilities study shall specify and estimate the cost of the equipment, engineering, procurement and construction work
(including overheads) needed to implement the conclusions of the system impact study(s).
(3) Design for any required interconnection facilities and/or upgrades shall be performed
under the facilities study agreement. The utility may contract with consultants to perform activities required under
the study agreement.
(4) The applicant and the utility may agree to allow the applicant to arrange for the design of
some of the interconnection facilities, but the proposed deign will be reviewed subject to modification by the utility
prior to acceptance.
(5) In cases where upgrades are required, the facilities study must be completed within 45
business days of the receipt of the executed facilities study agreement and deposit. In cases where no upgrades are
necessary, and the required facilities are limited to interconnection facilities, the facilities study must be completed
within 30 business days of the receipt of the executed facilities study agreement and deposit.
(6) Once the facilities study is completed, a facilities study report shall be prepared and
transmitted to the applicant. Upon request, the utility shall provide applicant supporting documentation and
workpapers developed in the preparation of the interconnection facilities study.
(7) Upon completion of the facilities study, and with the agreement of the interconnection
applicant to pay for interconnection facilities or upgrades identified in the study, the utility shall provide the
interconnection applicant with an executable interconnection agreement within five business days.
<b>F.</b> Payment for Study Costs. For each of the studies conducted, any study fees shall be based on the
utility's actual costs and will be invoiced to the applicant after the study is completed and delivered and will include
a summary of professional time. The applicant must pay any study costs that exceed the deposit without interest
within 30 calendar days on receipt of the invoice or resolution of any dispute. If the deposit exceeds the invoiced
fees, the utility shall refund such excess within 30 calendar days of the invoice without interest.
17.9.568.19 COST SHARING FOR INTERCONNECTION UPGRADES:
A. The cost of utility system modifications required pursuant to the fast track process or the full
interconnection study process shall be borne by the applicant unless otherwise agreed to by the parties or following a
determination by the commission that some or all of the costs constitute system benefits eligible for cost-sharing
options:
(1) The commission may determine on a case-by-case basis whether the cost of distribution
system upgrades necessary to interconnect one or more generating facilities may be eligible for some form of cost-
sharing:
(a) among several developers using the same distribution facilities,
(b) among all ratepayers of the qualifying utility via rate base adjustments, or
(c) among an ratepayers of the quantying utility via rate base adjustments, of among ratepayers of the same rate class as subscribers to the community solar
facility via a rate rider for that class;
(2) In making such a determination that there are public benefits to such a cost-sharing
mechanism, the commission shall employ the same analysis as provided for cost-sharing or rate basing grid
modernization projects as defined by Section 62-8-13 NMSA 1978 (Grid Modernization Act 2019, HB 233) to make
a finding that the approved expenditures are:
(a) reasonably expected to improve the public utility's electrical system efficiency,
reliability, resilience and security; maintain reasonable operations, maintenance and ratepayer costs; and meet
energy demands through a flexible, diversified and distributed energy portfolio;
(b) reasonably expected to increase access to, and use of, clean and renewable
energy, with consideration given to increasing access to low-income subscribers and subscribers in underserved
communities;
(c) designed to contribute to the reduction of air pollution, including greenhouse
gases;

(3) Expenditures approved for such cost sharing of necessary interconnection upgrades shall not be considered a "subsidization" subject to the three percent limitations spelled out in this rule or in the Community Solar Act.

#### 17.9.568.<del>1720</del> INTERCONNECTION AGREEMENT

- **A.** For <u>level one or level two simplified process</u> interconnection projects, the applicant will sign a form interconnection agreement (<u>IA</u>) at the time it submits its <u>interconnection</u> application, and the utility will return a counter-signed <u>IA</u>interconnection agreement with the screen results.
- **B.** For other project levels fast track and detailed study interconnection projects: after receiving an interconnection agreement from the utility, the interconnection customerapplicant shall have 30 business days or another mutually agreeable timeframe to sign and return the interconnection agreement. If the interconnection customer applicant does not sign the interconnection agreement within 30 business days, the interconnection requestapplication shall be deemed withdrawn. After the interconnection agreement is signed by the parties, the interconnection of the generating facility shall proceed under the provisions of the interconnection agreement. [17.9.568.17 NMAC Rp, 17.9.568.17 NMAC, xx/xx/2022]

#### 17.9.568.<u>1821</u> PERMISSION TO OPERATE

- A. The interconnection customer may not commence operations until its <u>interconnection</u> application is deemed complete and the utility has issued a permission to operate (PTO). <u>The interconnection customer shall</u> provide the utility with at least t10 business days' notice of the anticipated start date of the generating facility.
- B. Within 10 business days of receiving the notice of the anticipated start date of the generating facility, the utility may conduct an inspection of the generating facility at a time mutually agreeable to the parties. The inspection may include verification that the facility complies with applicable codes and standards, the terms of the interconnection agreement, and may include a witness test. The utility may also schedule appropriate metering replacement or programming if necessary. If the generating facility passes the inspection, the utility shall provide written notice of the passage within three business days. If a Generating Facility initially fails a utility inspection, the utility shall offer to redo the inspection at the applicant's expense at a time mutually agreeable to the parties. If the utility determines that the generating facility fails the inspection, the utility must provide the applicant with a written explanation detailing the reasons for the failure and any standards violated. If the utility determines no inspection is necessary, it shall notify the applicant within three business days of receiving the notice of the anticipated start date.
- **B.C.** For level onesimplified process and level two fast track generating facilities, utility approval for interconnection (i.e. permission to operate) shall normally be processed not later than 10 business days following the utility's receipt of:
- (1) a completed net energy metering interconnection requestapplication, if appropriate, including all supporting documents and required payments, and
  - (2) a completed signed interconnection agreement, if appropriate; orand
- (3) evidence of the applicant's final electric inspection clearance from the governmental authority having jurisdiction over the generating facility. If the 310-day period cannot be met, the utility shall-notify the applicant and the commission of the reason for the inability to process the interconnection request and the expected completion date.
- **D.** A generating facility that has not been approved for parallel operation within one year of execution of the interconnection agreement is subject to withdrawal by utility; however, the utility may not deem the interconnection application withdrawn if:
  - (1) Applicant provides reasonable evidence that the interconnection application is still active;
- (2) The delay is at no fault of applicant. [17.9.568.18 NMAC Rp, 17.9.568.18 NMAC, xx/xx/2022]

or

17.9.568.1922 INTERCONNECTION APPLICATION REVIEW FLOW CHART AND SCREEN CRITERIA: utilities shall use the screen criteria described in Attachment XXX to evaluate all interconnection applications a flow chart of the review process and screens is provided in Appendix 2. [17.9.568.19 NMAC – Rp, 17.9.568.19 NMAC, xx/xx/2022]

17.9.568.203 GENERAL PROVISIONS APPLICABLE TO INTERCONNECTION APPLICATIONS:

- **A.** An interconnection customerapplicant shall pay the following application fee to the utility at the time it delivers its interconnection application to the utility:
  - (1) \$150.00 if the proposed generating facilities will have a nameplate rating less than or equal to 25 kW;
  - (2) \$300.00 if the proposed generating facilities will have a nameplate rating greater than 25 kW and less than or equal to 100 kW; or
  - (3) \$300.00 + \$1.00 per kW if the proposed generating facilities will have a nameplate rating greater than 100 kW.
  - (4) If the proposed generating facility is non-export only, it shall pay \$\frac{300}{150}.00\$, regardless of if it has a nameplate rating below 100kW, or \$300 if the nameplate rating is greater than 100 kW.
- **B.** In addition to the fees authorized by this rule, a small utility may collect from the interconnection customer applicant the reasonable costs incurred to obtain necessary expertise from consultants to review interconnection applications for generating facilities with rated capacities greater than 10 kW. A small utility shall provide a good faith estimate of the costs of such consultants to an interconnection customer applicant within 10 business days of the date the interconnection application is delivered to the utility.
- Commissioning tests of the interconnection customer's installed equipment shall be performed pursuant to applicable codes and standards, including IEEE 1547.1 "IEEE standard conformance test procedures for equipment interconnecting distributed energy resources with electric power systems." A utility must be given at least five business days written notice of the tests, or as otherwise mutually agreed to by the parties, and may be present to witness the commissioning tests. An interconnection customer shall reimburse a utility for its costs associated with witnessing commissioning tests performed except that a utility may not charge a fee in addition to the interconnection application fee for the cost of witnessing commissioning tests for inverter-based generating facilities that have rated nameplate capacities that are less than or equal to 25 kW.
- **D.** If an interconnection customer requests an increase in capacity for an existing generating facility, the interconnection application shall be evaluated on the basis of the new total capacity of the generating facility. If an interconnection customer requests interconnection of a generating facility that includes multiple energy production devices at a site for which the interconnection customer seeks a single point of common coupling, the interconnection application shall be evaluated on the basis of the aggregate capacity of the multiple devices.
- **E.** Confidential information shall remain confidential unless otherwise ordered by the commission. Confidential information shall mean any confidential and proprietary information provided by one party to the other party that is clearly marked or otherwise designated "confidential". [17.9.568.20 NMAC Rp, 17.9.568.20 NMAC, xx/xx/2022]

#### 17.9.568.244 GENERAL PROVISIONS APPLICABLE TO UTILITIES:

- **A.** A utility shall interconnect any interconnection customer that meets the interconnection criteria set forth in this rule. A utility shall make reasonable efforts to keep the interconnection customer applicant informed of the status and progress.
- **B.** Utilities shall reasonably endeavor to aid and assist interconnection customers to ensure that a proposed generating facility's interconnection design, operation, and maintenance are appropriate for connection to the utility's system. This may include consultations with the interconnection customer applicant and its engineerings and other representatives.
- C. Utilities shall make reasonable efforts to meet all time frames provided for in this rule unless a utility and an interconnection customer applicant agree to a different schedule. If a utility cannot meet a deadline provided herein, it shall notify the interconnection customer applicant in writing within one business day, explain the reason for its inability to meet the deadline, and provide an estimated time by which it will complete its activity. The utility shall keep the applicant updated of any changes in the expected completion date.
- **D.** Utilities shall use the same reasonable efforts in processing and analyzing interconnection applications from all interconnection customers, whether the generating facility is owned or operated by the utility, its subsidiaries or affiliates, or others.
- **E.** Utilities shall maintain records for three years of each interconnection application received, the times required to complete each interconnection application approval or disapproval, and justification for the utility's disapproval of any interconnection application. Other reporting requirements are specified in 17.9.568.23 NMAC.
- **F.** Utilities shall maintain current, clear, and concise information regarding this rule including the name, telephone number, and email address of contact persons. The information shall be easily accessible on the utility's website beginning within one month of the effective date of this rule, or the information may be provided in

bill inserts or separate mailings sent no later than one month after the effective date of this rule and no less often than once each year thereafter. Each utility shall maintain a copy of this rule at its principal office and make the same available for public inspection and copying during regular business hours.

- **G.** A small utility that uses a consultant to review a proposal to interconnect a generating facility with the small utility's system may extend each of the time deadlines for review of the fast track process by a period not to exceed 20 business days provided that the small utility shall make a good faith effort to complete the review sooner.
- **H.** Compliance with this interconnection process does not constitute a request for, nor provision of any transmission delivery service, or any local distribution delivery service. Interconnection under this rule does not constitute an agreement by the utility to purchase or pay for any energy, inadvertently or intentionally exported. [17.9.568.21 NMAC Rp, 17.9.568.21 NMAC, xx/xx/2022]

#### 17.9.568.225 GENERAL PROVISIONS APPLICABLE TO INTERCONNECTION CUSTOMERS:

- **A.** An interconnection customer is responsible for the prudent maintenance and upkeep of its interconnection equipment.
- **B.** Upon the petition of a utility, for good cause shown, the commission may require a customer with a generating facility with a rated capacity of 250 kW or less to obtain general liability insurance prior to connecting with a public utility. A utility may require that an interconnection customer applicant proposing to connect a generating facility with a rated capacity greater than 250 kW provide proof of insurance with reasonable limits not to exceed \$1,000,000.00 or other reasonable evidence of financial responsibility. [17.9.568.22 NMAC Rp, 17.9.568.22 NMAC, xx/xx/2022]

#### 17.9.568.26 **EXTENSIONS**

A. The applicant may request in writing the extension of one timeline set by these rules. The requested extension may be for up to one-half of the time originally allotted (e.g., a 10 business day extension for a 20 business day timeframe). The utility shall not unreasonably refuse this request. If further timeline extensions are necessary, the applicant may request an extension and the utility shall grant the extension so long as it does not unreasonably delay the processing of later queued interconnection applications

#### **17.9.568.237 DISPUTE RESOLUTION**

- **A.** Each party agrees to attempt to resolve all disputes arising hereunder promptly, equitably and in a good faith manner.
- **B.** In the event of a dispute, either party shall provide the other party with a written notice of dispute. Such notice shall describe in detail the nature of the dispute. The non-disputing party shall acknowledge the notice within three business days of its receipt and identify a representative with the authority to make decisions for the non-disputing party with respect to the dispute.
- C. If the dispute has not been resolved in eight business days for timeline related disputes or 20 business days for all other disputes after the receipt of the notice, the parties may, upon mutual agreement, (1) continue negotiations for an additional 10 business days, or (2) seek resolution through the assistance of a dispute resolution service. The dispute resolution service will assist the parties in either resolving the dispute or in selecting an appropriate dispute resolution venue (e.g., mediation, settlement judge, early neutral evaluation, or qualified technical expert(s)) to assist the parties in resolving their dispute. Each party will be responsible for one-half of any costs paid to neutral third-parties.
- **D.** For any technical disputes, both parties shall have a qualified technical representative present in the attempts to resolve the dispute.
- **E.** If the dispute remains unresolved after 30 business days, either party may petition the commission to handle the dispute as a formal complaint or may exercise whatever rights and remedies it may have in equity or law.
- **F.** If the dispute remains unresolved after 90 business days, a formal complaint to the commission has not been submitted, and the dispute is causing delays to other projects in the queue, the utility may adjust the queue position of the disputing project. The disputing party shall be responsible for any additional study costs that may result from the change in queue position.

[17.9.568.23 NMAC – Rp, 17.9.568.23 NMAC, xx/xx/2022]

#### 17.9.568.248 REPORTING REQUIREMENTS

- **A.** For each request for <u>a</u> pre-application <u>review report</u> or <u>interconnection</u> application <u>for interconnection</u> received, the utility shall collect and retain the following data, at a minimum:
  - (1) Facility capacity
  - (2) DER type (technology);
  - (3) Number of pre-application reports requested and processed;
  - (4) Date of <u>interconnection</u> application submittal;
  - (5) Date <u>interconnection</u> application deemed complete;
  - (6) Date and disposition at applicable milestones in the interconnection process, including which screens, if any, are failed in the applicable process:
    - a.(a) Initial review, (under the simplified or fast track process),
    - **b.(b)** Supplemental review,
    - **e**-(c) -Feasibility study,
    - **e**.(d) System impact study,
    - d.(e) Facilities study,
    - **e.(f)** Interconnection agreement, and
    - **f.**(g) Permission to operate.
    - (7) Interconnection fees and study costs assessed to the customer.
    - (7)(8) Interconnection facility and distribution upgrade costs assessed to the customer.
- (9) Number of times outside consultants were utilized and the range of fees assessed to the customer for the consultants services.
- **B.** Twice annually each utility shall submit to the commission and make available to the public on its website an interconnection report with the following information. The report shall contain information in the following areas, including relevant totals for both the year.
- (1) Pre-application reports: total pre-application reports requested, completed within the time limits (20 business days for system sizes up to one MW, and 30 business days for system sizes greater than one MW30 230 days for front of the meter) or 30 days for behind the meter), and number completed outside the specified time limits.
- (2) Interconnection applications: total number received, (noting nameplate rating of proposed systems).
- (3) Number of <u>interconnection</u> applications processed within specified timeframes and completed outside of —specified time limits.
- (4) Number of interconnection upgrades completed within negotiated timelines and outside of negotiated timelines, including a narrative on how much time it is taking to complete typical upgrades.
- (4)(5) Number of interconnection applications that required more than initial review: median number of days to complete such reviews.
  - (5)(6) Number of <u>interconnection</u> applications withdrawn.
  - (6)(7) Number of interconnection agreements executed.
- (8) A table showing the range of fees charged for the feasibility study, system impact study, and facilities study.
- (9) A table showing how many projects failed each of the interconnection screens in the simplified, fast track and supplemental review processes broken out by project size and type (i.e. solar, storage, solar+storage) in the following increments: up to 25 kW, 25-100 kW, 100-500 kW, 500 kW to 2 MW, 2 to 5 MW.
- (7)(10) A narrative of how the process is working and where there is potential for improvement by the utility or interconnection applicants.

[17.9.568.24 NMAC – Rp, 17.9.568.24 NMAC, xx/xx/2022]

#### 17.9.568.2**59** SAFETY PROVISIONS:

- **A.** A DER project that operates outside of its approved export status or operational limits may be disconnected by the utility following notification of violation and a 30-day cure period.
- **B.** Inverter based DER that does not conform to the IEEE 1547-2018 standards may be required to disconnect from the distribution system during periods of voltage or frequency instability. An interconnection customer shall separate from the utility system in the event of any one or more of the following conditions:
  - (1) a fault on the generating facility's system; or
  - (2) a generating facility contribution to a utility system emergency; or
  - (3) abnormal frequency or voltage conditions on the utility's system; or
  - (4) any occurrence or condition that will endanger utility employees or customers; or

- (5) a generating facility condition that would otherwise interfere with a utility's ability to provide safe and reliable electric service to other customers; or
  - (6) the sudden loss of the system power.
- C. The utility may temporarily disconnect the generating facility upon the following conditions:
- (1) For scheduled outages per notice requirements in the utility's tariff or commission rules.
- (2) For unscheduled outages or emergency conditions pursuant to the utility's tariff or commission rules subsection B.
- (3) If the generating facility does not operate in the manner consistent with these terms and conditions.
- (4) The utility shall inform the customer in advance of any scheduled disconnection, or as is reasonable after an unscheduled disconnection.
- **D.** A visible-open, load break disconnect switch between the generating facility and the utility system that is visibly marked "generating facility generation disconnect" and is accessible to and lockable by the utility is required for all generating facilities except for those generating facilities with a maximum capacity rating of 10 kW or less that use a certified inverter including a self-contained renewable energy certificate (REC) meter and either:
  - (1) a utility accessible AC load break disconnect; or
- (2) a utility accessible DC load break disconnect where there is no other source of generated or stored energy connected to the system.
- **DE.** Interconnection customers shall post a permanent and weatherproof one-line electrical diagram of the generating facility located at the point of service connection to the utility. Generating facilities where the disconnect switch is not located in close proximity to the utility meter must post a permanent and weatherproof map showing the location of all major equipment including the utility meter point, the generating facility generation disconnect, and the generating facility generation breaker. Non-residential generating facilities larger than 10 kW shall include with or attached to the map the names and current telephone numbers of at least two persons authorized to provide access to the generating facility and who have authority to make decisions regarding the generating facility interconnection and operation.
- **EF**. If the generating facility interconnection equipment package is not certified or if a certified equipment package has been modified, the generating facility interconnection equipment package shall be reviewed and approved by a professional electrical engineer, registered in the state of New Mexico. [17.9.568.25 NMAC Rp, 17.9.568.25 NMAC, xx/xx/2022]
- 17.9.568.2630 VARIANCES: A party may file a request for a variance from the requirements of this rule. Such application shall describe the reasons for the variance; set out the effect of complying with this rule on the parties and the utility's customers if the variance is not granted; identify the section(s) of this rule for which the variance is requested; describe the expected result which the request will have if granted; and state how the variance will aid in achieving the purposes of this rule. The commission may grant a request for a procedural variance through an order issued by the chairman, a commissioner or a designated hearing examiner. Other variances shall be presented to the commission as a body for determination.

[17.9.568.26 NMAC - Rp, 17.9.568.26 NMAC, xx/xx/2022]

#### **HISTORY OF 17.9.568 NMAC:**

Pre-NMAC History: None.

#### **History of Repealed Material:**

17.9.568 NMAC, Interconnection of Generating Facilities with a Rated Capacity up to and Including 10 MW Connecting to a Utility System (filed 10/15/2008) repealed effective xx/xx/2022.

#### Other History:

17.9.568 NMAC, Interconnection of Generating Facilities with a Rated Capacity up to and Including 10 MW Connecting to a Utility System (filed 10/15/2008) was replaced by 17.9.568 NMAC, Interconnection of Generating Facilities with a Nameplate Capacity up to and Including 10 MW Connecting to a Utility System, effective xx/xx/20222.

# **APPENDIX 1**

# **APPENDIX 1A**

# **Simplified Interconnection Application Certified Inverter-Based Generating Facilities** With an Export Capacity up to and including 25 kWAC and a Nameplate Rating not exceeding 50 kW

This Application is considered complete when it provides all applicable and correct information required below. Additional information to evaluate the Application may be required.

Processing Fee

21-00266-UT

A fee of \$150 must accompany this Application.
Interconnection Customer
Name:
Contact Person:
Address:
City: State: Zip:
Telephone (Day): (Evening):
Fax: E-Mail Address:
Engineering Firm (If Applicable):
Contact Person:
Address:
City: State: Zip:
Telephone:
Fax: E-Mail Address:
Contact (if different from Interconnection Customer)
Name:
Address:
City: State: Zip:
Telephone (Day): (Evening):
Fax: E-Mail Address:

Owner of the facility (include % ownership by any electric utility):
Generating Facility Information:
Location (if different from above):
Electric Service Company:
Account Number:
Inverter Information:
Inverter Manufacturer:Model
Nameplate Rating: (kW) (kVA) (AC Volts)
Export Capacity Value (in kW) (if Export
Capacity is less than Nameplate Rating,
denote export controls below):
Single PhaseThree Phase  Prime Mover: Photovoltaic, Reciprocating Engine, Fuel Cell, Turbine, Storage
Batteries, Other (describe) Energy Source: Solar, Wind, Hydro, Diesel, Natural Gas,
Fuel Oil, Other (describe)
Is the equipment UL1741 Listed? Yes No
If Yes, attach manufacturer's cut-sheet showing UL1741 listing
Estimated Installation Date:Estimated In-Service Date:
Limited Export and Non-Export Controls Information  Manufacturer:
Model Number:

Limited Export or Non	-Export?	☐ Non-Export
Control Type:	Reverse Power Protection	Minimum Power Protection
_	Relative Distributed Energy Resource Rating	Configured Power Rating
_	Power Control System	Export Control using mutually agreed-upon means
_	Directional Power Protection	
Control Power Setting:		
Control Power Time D	elay (if any):	
	Open-Loop Response Time: Maximum	n Average
Export limiting Import limiting	ode node g from all sources from ESS to ESS	
Battery Storage Facili	ty Information (If Applicable)	
Do the batteries share	an inverter with a renewable energy system	n? □ Yes □ No
Does the applicant int	end to have the batteries charged by the dis	stribution grid?
System Manufacturer:		
Model:		
AC):	e/Discharge Rating (kW stem Charge/Discharge Rate (kW AC per	
Battery Energy Capac	ity (kWh):	

# **Battery Operational Information** Backup – allows for partial or whole home transition to off-grid during a grid outage $\square$ Yes $\square$ No Solar Self-Powered – the battery will charge from the renewable energy source during normal operation and discharge to serve loads behind your meter ☐ Yes ☐ No Solar Non-Export – limits the export of energy to the grid to zero for both the battery and solar inverter, even if the battery system is fully charged and there is excess renewable source energy $\square$ Yes $\square$ No Time-Based Control (sometimes called time-of-use or TOU mode) – the battery charges during off-peak hours and discharges to serve onsite loads during on-peak hours. $\square$ Yes $\square$ No Describe any other intended operation of the battery: Reference Point of Applicability (RPA) Designation Where is the desired RPA location? [Check one] Point of DER connection (PoC) Point of interconnection / point of common coupling (PCC)

# Why does this DER fit the chosen RPA? [Check all that apply]

Another point between PoC and PCC Different RPAs for different DER units

Zero-sequence continuity between PCC and PoC is maintained

No (detection location must be denoted in the one-line diagram)

The DER aggregate Nameplate Rating is less than 500 kVA

Annual average load demand is greater than 10% of the aggregate DER Nameplate Rating, and it is not capable of, or is prevented from, exporting more than 500 kVA for longer than 30 seconds.

Is the RPA location the same as above for detection of abnormal voltage, faults and open-phase conditions?

#### **General Information**

Enclose copy of site electrical one-line diagram showing the configuration of all Generating Facility equipment, Reference Point of Applicability, current and potential circuits, and protection and control schemes.

Enclose copy of any site documentation that indicates the precise physical location of the proposed Generating Facility (e.g., USGS topographic map or other diagram or documentation).

Enclose a copy of specification sheets for all applicable interface and control equipment, e.g., inverters, energy

storage system, gateway, plant controller, automatic transfer switch and power control system. Are specific	ication
sheets enclosed?	
YesNo	

The Simplified Process is available only for inverter-based Generating Facilities that have a nameplate rating that does not exceed 50 kilowatts (kW) and an export capacity that does not exceed 25 kilowatts (kW) and that meet the codes, standards, and certification requirements of Title 17.9.568.12, or the QRU has reviewed the design or tested the proposed Generating Facility and is satisfied that it is safe to operate.

List components of the Generating Facility equipment package that are currently certified:
Equipment Type Certifying Entity
1.
2.
3.
4.
5.
Interconnection Customer Signature
I hereby certify that, to the best of my knowledge, the information provided in this Application is true. I agree to abide by the Terms and Conditions for Interconnecting an Inverter-Based Generating Facility with a nameplate rating that does not exceed 50 kilowatts (kW) and an export capacity that does not exceed 25 kilowatts (kW) and return the notice of completion when the Generating Facility has been installed.
Signed:
Title:
Date:
Utility Signature
The undersigned Utility agrees to abide by the Terms and Conditions and that optional paragraph 6.0 Indemnification $\square$ applies $\square$ does not apply.
Signed:
Title:
Date:

# **APPENDIX 1B Standard Interconnection Application**

A Customer-Generator applicant ("Applicant") herel (Utility) to install and operate a generating	
theutility system.	
Written applications should be submitted by mail, e-mail or follows:	fax to [insert utility name], as
[Utility]:	
[Utility's address]:	
Fax Number:E-Mail Address:	
[Utility] Contact Name:	
[Utility] Contact Title:	
An application is a Complete Application when it provide required below. (Additional information to evaluate a reque required and will be so requested from the Interconnection application is deemed complete).	st for interconnection may be
SECTION 1. APPLICANT INFORMATION	
Legal Name of Interconnecting Applicant (or, if an Individua	al, Individual's Name)
Name:	
Mailing Address:	
City: ; State: ;	Zip Code:
Facility Location (if different from above):	
Telephone (Daytime):	
Telephone (Evening):	
Fax Number:	
E-Mail Address:	
Utility	
(Existing Account Number, if generator to be interconnected on the Customer side of a utility revenue meter)	
Type of Interconnect Service Applied for (choose one): Energy Only, Load Response (no export)	

# SECTION 2. GENERATOR QUALIFICATIONS

Data apply only to the Generating Facility, not the Interconnection Facilities.

Energy Source:
□ Solar
□ Wind
□ Hydro
☐ Hydro type (e.g. Run-of-River)
□ Diesel
□ Natural Gas
☐ Fuel Oil
☐ Other (state type);
Prime Mover:
☐ Fuel Cell
□ Recip Engine
☐ Gas Turbine
☐ Steam Turbine
☐ MicroTurbine
$\square$ PV
☐ Storage Batteries
☐ Other (state type);
Type of Generator:SynchronousInductionInverter
Generator Nameplate Rating:kW (Typical); Generator Nameplate kVA:
Number of Units:
Total Export Capacity: kW kVA
Interconnection Customer or Customer-Site Load:kW (if none, so state)
Typical Reactive Load (if known):

List compo certified:	nents of the Gene	rating Facility	Equipmen	nt Packa	ge that are cu	ırrentl	y
	ipment Type	Certif	'ying Entit	у			
-	e mover compatib esNo	le with the cer	tified prote	ective re	elay package?	<b>?</b>	
collecto & Num Namepl (Sur Namepl	for energy storage or) Manufacturer, ber: Version Nun late Output Power mmer) late Output Power mmer)	Model Name nber: r Rating in kW; (Winter r Rating in kV	r) A:				
	Generator Power Power Lea		La	gging: _			
	ber of Generators n:; E		-				
Inverter	Manufacturer,	Model	Name	&	Number	(if	used):
List of	adjustable set	points for	the pro	tective	equipment	or	software:
	ompleted Power ction Application.	•	Flow dat	a sheet	must be su	pplied	with the
Max de Harmor	Facility Charactersign fault contribution Characteristics requirements:	ution current:			achines): neous or RMS	<b>3</b> ?	
RPM F	Facility Character requency: tral Grounding R						
Direct A Direct A Direct A	us Generators: Axis Synchronous Axis Transient Re Axis Subtransient ve Sequence Reac	eactance, X' d: Reactance, X'	'd:	P.U.			

Zero Sequence Reactance, X0:_	
KVA Base:	
Field Volts:	
Field Amperes:	_
<u>Induction Generators:</u>	
Motoring Power (kW):	
I2t or K (Heating Time Constant	<u> </u>
Rotor Resistance, Rr:	
Stator Resistance, Rs:	
Stator Reactance, Xs:	
Rotor Reactance, Xr:	
Magnetizing Reactance, Xm:	
Short Circuit Reactance, Xd":	
Exciting Current:	
Temperature Rise:	
Frame Size:	
Design Letter:	
Reactive Power Required In Var	rs (No Load):
Reactive Power Required In Var	rs (Full Load):
Total Rotating Inertia, H:	Per Unit on kVA Base

Note: Please contact the Utility prior to submitting the Interconnection Application to determine if the specified information above is required.

# Excitation and Governor System Data for Synchronous Generators Only:

Provide appropriate IEEE model block diagram of excitation system, governor system and power system stabilizer (PSS) in accordance with the regional reliability council criteria. A PSS may be determined to be required by applicable studies. A copy of the manufacturer's block diagram may not be substituted.

SECTION 3. INTERCONNECTIO	N FACILITIE	S INFORMAT	ION	
Will a transformer be used be	etween the g	enerator and	the Point o	f Common Coupling?
YesNo				1 0
Transformer Data (If Applical	ole, for Interc	connection Cu	ustomer-Ow	ned Transformer):
Is the transformer:sin	ngle phase	three pha	ise? Size:	<u>k</u> VA
Transformer Impedance:_	perce	ent on	kVA l	Base
If Three Phase:				
Transformer Primary:	Volts	Delta	Wye	Wye Grounded
Transformer Secondary:				
Transformer Tertiary:				
Transformer Fuse Data (If Ap (Attach copy of fuse manu Curves)	-			
•		Type	:	Size:
Speed:			·	
Interconnecting Circuit Break Manufacturer:	er (if applica	Ty	ype:	Trin Const
Load Rating (Amps):	Interr	upting Katin	g (Amps):	Trip Speed
(Cycles):				

		lays (If Applicable):		
If Microprocessor-				
Setpoint Functions a	•	ole Setpoints for the policy Minimum	Maximum	pment or software:
1.				
2.				
3.				
4.				
5.				
6.				
If Discrete Compo				
(Enclose Copy of	any Propose	ed Time-Overcurrent	Coordination (	Curves)
Manufacturer:	Type:	Style/Catalog		Proposed Setting:
Manufacturer:	Type:	Style/Catalog		Proposed Setting:
Manufacturer:	Type:	Style/Catalog	-	Proposed Setting:
Manufacturer:	Type:	Style/Catalog	_	Proposed Setting:
Manufacturer:	Type:	Style/Catalog	g No.:	Proposed Setting:
a = 1	- (T)			
Current Transform				
`	Manufacture	er's Excitation and R	atio Correction	Curves)
Manufacturer:	_			
• •	lass: Propos	ed Ratio Connection	<b>:</b>	
Manufacturer:				
Type: Accuracy C	lass: Propos	ed Ratio Connection	<b>:</b>	
D 4 4 1 T C	D . (II	. A. 1' 11 \		
Potential Transfor	mer Data (II	Applicable):		
Manufacturer:	1 D	ID (' C ('		
• -	iass: Propos	ed Ratio Connection	<b>:</b>	
Manufacturer:	1 D	- 1 Dadia Campadian		
Type: Accuracy C	iass: Propos	ed Ratio Connection	<b>:</b>	
	E 40			
imited Export and No	on-Export C	ontrols Information		
Manufacturer:				
Model Number:				
viodei ivambei.				
Limited Export or Non	-Export?	☐ Limited Export	: <u> </u>	Non-Export
Control Type:	Revers	se Power Protection		Minimum Power Protection
		we Distributed Energy burce Rating		Configured Power Rating

	Power Control System	Export Control using mutually agreed-upon means
	Directional Power Protection	
Control Power Setting	<u> </u>	
Control Power Time l	Delay (if any):	
Power Control System	m Open-Loop Response Time: Maximum	Average
<u></u>		
When grid-connected	I, will the PCS employ any of the following?	[Select all that apply]
Unrestricted r	node	
Export only n	node	
☐ Import only n	node	
☐ No exchange	mode	
☐ Export-limiting	g from all sources	
Export limiting	g from ESS	
☐ Import limiting	g to ESS	
Does the applicant in	e an inverter with a renewable energy system?  Itend to have the batteries charged by the distribution	-
System Manufacture	r:	
Model:		
Battery System Char AC):	ge/Discharge Rating (kW	
	ystem Charge/Discharge Rate (kW AC per	
Battery Energy Capa	city (kWh):	
Battery Operational  Backup – allows for p	Information artial or whole home transition to off-grid during	a grid outage □ Yes □ No
Solar Self-Powered – discharge to serve load	the battery will charge from the renewable energy ds behind your meter $\Box$ Yes $\Box$ No	y source during normal operation and

Solar Non-Export – limits the export of energy to the grid to zero for both the battery and solar inverter, even if the battery system is fully charged and there is excess renewable source energy $\square$ Yes $\square$ No
Time-Based Control (sometimes called time-of-use or TOU mode) – the battery charges during off-peak hours and discharges to serve onsite loads during on-peak hours. $\square$ Yes $\square$ No
Describe any other intended operation of the battery:
Reference Point of Applicability (RPA) Designation
Where is the desired RPA location? [Check one]
☐ Point of DER connection (PoC)
☐ Point of interconnection / point of common coupling (PCC)
Another point between PoC and PCC
☐ Different RPAs for different DER units
Is the RPA location the same as above for detection of abnormal voltage, faults and open-phase conditions?
☐ Yes
☐ No (detection location must be denoted in the one-line diagram)
Why does this DER fit the chosen RPA? [Check all that apply]
Zero-sequence continuity between PCC and PoC is maintained
☐ The DER aggregate Nameplate Rating is less than 500 kVA
Annual average load demand is greater than 10% of the aggregate DER Nameplate Rating, and it is not capable of, or is prevented from, exporting more than 500 kVA for longer than 30 seconds.

# **SECTION 4. GENERAL INFORMATION**

Enclose copy of site electrical one-line diagram showing the configuration of all Generating Facility equipment, Reference Point of Applicability, current and potential circuits, and protection and control schemes.

This one-line diagram must be signed and stamped by a licensed Professional Engineer if the Generating Facility is larger than 50 kW. Is One-Line Diagram Enclosed?
Enclose copy of any site documentation that indicates the precise physical location of the proposed Generating Facility (e.g., USGS topographic map or other diagram or documentation).
Proposed location of protective interface equipment on property (include address if different from the Interconnection Customer's address)
Enclose copy of any site documentation that describes and details the operation of the protection and control schemes. Is Available Documentation Enclosed? YesNo
Enclose copies of schematic drawings for all protection and control circuits, relay current circuits, relay potential circuits, and alarm/monitoring circuits (if applicable). Are Schematic Drawings Enclosed? YesNo
Enclose a copy of specification sheets for all applicable interface and control equipment, e.g., inverters, energy storage system, gateway, plant controller, automatic transfer switch and power control system.  Are specification sheets enclosed? YesNo

## **SECTION 5. APPLICANT SIGNATURE**

I hereby certify that, to the best of my knowledge, all the information provided in the Interconnection Application is true and correct. I also agree to install a Warning Label provided by (utility) on or near my service meter location. Generating systems must be compliant with IEEE, NEC, ANSI, and UL standards, where applicable. By signing below, the Applicant also certifies that the installed generating equipment meets the appropriate preceding requirement(s) and can supply documentation that confirms compliance.

Signature of	Applicant:	
Date:		
SECTION 6.	Information Requir	ED PRIOR TO PHYSICAL INTERCONNECTION
(Not requir	ed as part of the appli	cation, unless available at time of application.)
Installing El	ectrician:	Firm:
License No.	:	
Mailing Add	dress:	
City:	State:	Zip Code:
Telephone:_		
Installation	Date:	
Interconnect	tion Date:	
Signed (Insp	pector – if required):	
Date:		<u>_</u>
(In lieu of si	gnature of Inspector, a	copy of the final inspection certificate may be
attached)		

#### **APPENDIX 1C**

## **Interconnection Agreement**

# Generating Facilities With a Rated Capacity No Greater than 10 MW and Not Qualified for Simplified Interconnection

This	Generating	Facility	Interconnection	Agreement ("Agreem	ent") is entered in	nto by
and	between				("Utility")	and
				("Interconnection	Customer").	The
Interd	connection C	Custome	r and the Utility	are sometimes referr	ed to in this Agre	ement
jointl	y as "Parties	or indi	ividually as a "Pa	arty".		

In consideration of the mutual promises and obligations stated in this Agreement and its appendices, the Parties agree as follows:

#### I. SCOPE AND PURPOSE

- A) This Agreement is intended to provide for the Interconnection Customer to interconnect and operate the Generating Facility in parallel with the Utility's System. Appendix A provides a one-line diagram of the Generating Facility and the Point of Common Coupling. Appendix B provides a description of the Generating Facility and its location.
- B) This Agreement contains the terms and conditions under which the Interconnection Customer may interconnect the Generating Facility to the Utility. This Agreement does not authorize the Interconnection Customer to export power or constitute an agreement to purchased or wheel the Interconnection Customer's power. Other services that the Interconnection Customer may require from the Utility, or others, may be covered under separate agreements.
- C) This Agreement allows for the occasional and inadvertent export of energy to the Utility, though it does not constitute an agreement by the Utility to purchase or pay for any energy, inadvertently or intentionally exported.
- D) This Agreement does not constitute a request for, nor the provision of any transmission delivery service or any local distribution delivery service.
- E) The technical requirements for interconnection are provided in New Mexico Administrative Code 17.9.568 and are incorporated and made part of this Agreement by this reference.

#### II. DEFINITIONS

- "Agreement" means this Generating Facility Interconnection Agreement and its appendices.
- "Business Day" means Monday through Friday, excluding holidays observed by the Utility.

- "Commission" means the New Mexico Public Regulation Commission.
- "Generating Facility" means the Interconnection Customer's device for the production of electricity identified in the Interconnection Application, including all generators, electrical wires, equipment, and other facilities owned or provided by the Interconnection Customer for the purpose of producing electric power.
- "Generator" means any device producing electrical energy, including rotating generators driven by wind, steam turbines, internal combustion engines, hydraulic turbines, solar panels, fuel cells, or any other electric producing device, including energy storage technologies.
- "Interconnection Application" means the request by an Interconnection Customer to interconnect a new Generating Facility, or to increase the capacity or make a material modification to the operating characteristics of an existing Generating Facility that is interconnected with the Utility's System.
- "Interconnection Customer" is the person or entity so defined in the first paragraph of this Agreement.
- "Interconnection Facilities" means the Utility's Interconnection Facilities and the Interconnection Customer's Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Generating Facility and the Point of Common Coupling, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Generating Facility to the Utility's System. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades.
- "Nameplate rating" means the sum total of maximum rated power output of a DER's constituent generating units and/or ESS, as identified on the manufacturer's nameplate, regardless of whether it is limited by any approved means.
- "Point of Common Coupling" means the point where the Interconnection Facilities connect with the Utility's System.
- "System" means the facilities owned, controlled, or operated by the Utility that are used to provide electric service under a Utility's tariff.
- "System Emergency" means a condition on the Utility's System that is likely to result in imminent significant disruption of service to customers or is imminently likely to endanger life or property.
- "Upgrade" means the required additions and modifications to the Utility's System at or beyond the Point of Common Coupling. Upgrades do not include Interconnection Facilities.
- "Utility" is the entity so defined in the first paragraph of this Agreement.

#### III. GENERATING FACILITY DESCRIPTION

- A) A single-line diagram of the Generating Facility is attached to and made part of this Agreement as Appendix A. The single line diagram shows the general arrangement of how the Generating Facility is interconnected with the Utility's System and shows all major equipment, including visual isolation equipment, Point of Common Coupling, ownership of equipment and meter location(s).
- B) A description of the Generating Facility is attached to and made a part of this Agreement as Appendix B. Appendix B is standard form that provides the engineering and operating information about the Generating Facility, including the Generating Facility's Nameplate Rating, Export Capacity and scheduled operational (on-line) date.

#### IV. RESPONSIBILITIES OF THE PARTIES

- A) The Parties shall perform all obligations of this Agreement in accordance with all applicable laws and regulations.
- B) The Interconnection Customer shall design, construct, operate and maintain the Generating Facility in accordance with the equipment manufacturers' recommended maintenance schedules, and applicable laws and regulations, including local building codes and other applicable ordinances.
- C) Interconnection of the Generating Facility in no way effects the Utility's obligation to serve the Utility's customer at whose location the Generating Facility is sited pursuant to the tariffs applicable to the customer's class of service.
- D) The cost of utility system modifications required pursuant to the Fast Track process or the full interconnection study process shall be borne by the interconnection customer unless otherwise agreed to by the parties or following a determination by the commission that some or all of the costs constitute system benefits eligible for cost-sharing options as described in Rule 17.9.568.15.
- E) The Interconnection Customer shall grant to the Utility, at no expense to the Utility, all easements and rights-of-way necessary for the Utility to install, operate, maintain, replace, and remove the Utility's Interconnection Facilities and Upgrades, including, but not limited to, adequate and continuous access rights to property owned or controlled by the Interconnection Customer. If any part of the Interconnection Facilities or Upgrades is to be installed on property owned by any person who is not a party to this Agreement, the Interconnection Customer shall, at no expense to the Utility, obtain from the owner of the property all such necessary easements and rights-of-way for the Utility. The Utility has no obligation to commence procurement, installation or construction of the Utility's Interconnection Facilities or Upgrades until the Interconnection Customer has provided all documents the Utility deems necessary to enable the Utility to obtain and record such easements and rights-of-way.

## F) Upgrades:

a) The Utility shall design, construct, operate and maintain the Upgrades outlined in Appendix C in a good and workmanlike manner, and in

- accordance with standard design and engineering practices, and applicable laws and regulations, including local building codes and other applicable ordinances.
- b) Once installed, the Upgrades shall be owned and operated by the Utility and all costs associated with the operating and maintenance of the Upgrades, after the Generating Facility is operational, shall be the responsibility of the Utility, unless otherwise agreed.
- c) The Interconnection Customer grants permission for the Utility to begin construction and to procure the necessary facilities and equipment to complete the installation of the Upgrades, as outlined in Appendix C. The Interconnection Customer may, for any reason, cancel or modify the Generating Facility project, so that any or all of the Upgrades are not required to be installed. If for any reason, the Generating Facility project is canceled or modified, so that any or all of the Upgrades are not required, the Interconnection Customer shall be responsible for all costs incurred by the Utility, including, but not limited to the additional costs to remove and/or complete the installation of the Upgrades. The Interconnection Customer shall provide written notice to the Utility of cancellation or modification. Upon receipt of a cancellation or modification notice, the Utility shall take reasonable steps to minimize additional costs to the Interconnection Customer, where reasonably possible.

# G) Payments:

- 1) The Interconnection Customer shall provide for the payment of its obligations under this Agreement in one of the following ways:
  - i. The Interconnection Customer may pay the Utility the costs identified in Appendix C at the time the Parties execute this Agreement; or
  - ii. The Interconnection Customer may pay the Utility in accordance with Section IV.G(2) if, at the time the Parties execute this Agreement, the Interconnection Customer provides reasonably adequate assurance of its creditworthiness to the Utility. Reasonably adequate assurance may be satisfied by evidence of the Interconnection Customer's creditworthiness, or a letter of credit in an amount sufficient to cover the costs identified in Appendix C, or a guaranty from another entity accompanied by evidence of that entity's creditworthiness.
- 2) If the Interconnection Customer provides for assurance of creditworthiness in accordance with Section IV.G(1)(ii), the Utility will invoice the Interconnection Customer monthly for all amounts expended and all amounts for which the Utility has become obligated since the execution of this Agreement or the prior monthly invoice. The Interconnection Customer will pay each such invoice within 20 days.

#### V. TERM AND TERMINATION

- A) This Agreement becomes effective when the Interconnection Customer and the Utility have both signed this Agreement. The Agreement shall continue in full force and effect until the earliest date that one of the following events occurs:
  - 1) The Parties agree in writing to terminate the Agreement;

- 2) The Interconnection Customer terminates this Agreement by written notice to the Utility prior to the completion of the final acceptance testing of the Generating Facility by the Utility;
- 3) The Utility terminates this Agreement after 30 days written notice to the Interconnection Customer if the Interconnection Customer has failed to comply with the payment or creditworthiness terms of Section IV.G and has not taken appropriate corrective action;
- 4) The Utility terminates this Agreement after three days written notice to the Interconnection Customer if the Interconnection Customer does not obtain and deliver the easements and rights-of-way described in Section IV.E to the Utility within 90 days of the Utility's request for such easements and rights-of-way;
- 5) Once the Generating Facility is operational, the Interconnection Customer terminates this Agreement after 30 days written notice to the Utility, unless otherwise agreed; or,
- 6) The Utility terminates this Agreement after 30 days written notice to the Interconnection Customer if the Interconnection Customer fails to:
  - i. take all corrective actions specified in the Utility's written notice that the Generating Facility is out of compliance with the terms of this Agreement within the time frame set forth in such notice, provided that the terms and timeframes stated by the Utility conform to this Agreement; or
  - ii. to complete construction of the Generating Facility within 24 months of the date of this Agreement or as otherwise agreed.
- B) Upon termination of this Agreement the Utility may disconnected the Generating Facility from the Utility's System. The termination of this Agreement shall not relieve either Party of its liabilities and obligations, owed or continuing, at the time of the termination.

#### VI. OPERATIONAL ISSUES

- A) <u>Costs:</u> Each Party will, at its own cost and expense, operate, maintain, repair and inspect, and shall be fully responsible for, the facilities which it now or hereafter may own, unless otherwise specified.
- B) Right of Access: At all times, the Utility's personnel shall have access to the disconnect switch of the Generating Facility for any reasonable purpose in connection with the performance of the obligations imposed on it by this Agreement, to meet its obligation to operate the Utility safely and to provide service to its customers. If necessary for the purposes of this Agreement, the Interconnection Customer shall allow the Utility access to the Utility's equipment and facilities located on the premises.
- C) <u>Cooperation and Coordination:</u> Both the Utility and the Interconnection Customer shall communicate and coordinate their operations, so that the normal operation of the Utility does not unduly effect or interfere with the normal

- operation of the Generating Facility and the Generating Facility does not unduly effect or interfere with the normal operation of the Utility. Under abnormal operations of either the Generating Facility or the Utility system, the responsible Party shall provide timely communication to the other Party to allow mitigation of any potentially negative effects of the abnormal operation of their system.
- D) <u>Disconnection of Unit</u>: The Utility may disconnect the Generating Facility as reasonably necessary for the following reasons: termination of this Agreement; non-compliance with this Agreement; System Emergency, and routine maintenance, repairs and modifications to the Utility's System. When reasonably possible the Utility shall provide prior notice to the Interconnection Customer explaining the reason for the disconnection. If prior notice is not reasonably possible the Utility shall after the fact, provide information to the Interconnection Customer as to why the disconnection was required. The Utility shall expend reasonable effort to reconnect the Generating Facility in a timely manner and to mitigate damages and losses to the Interconnection Customer.
- E) Modifications to the Generating Facility: The Interconnection Customer shall notify the Utility in writing of any proposed modifications to the Generating Facility that could affect the Utility's System, providing twenty (20) Business Days notice or as many days notice as is reasonably possible. The notice shall provide all information needed by the Utility as part of the review described in this paragraph. Modifications that could affect the Utility's System include any change affecting the Generating Facility's Rated Capacity or Export Capacity and any modification of Interconnection Facilities, which include without limitation: protective systems, generation control systems, transfer switches/breakers, voltage transformers and current transformers. When reasonably possible the Interconnection Customer agrees not to make any material modifications to the Generating Facility until the Utility has approved the modifications, in writing, which approval shall not be unreasonably withheld. The Utility shall not take longer than ten (10) Business Days to review and respond to the proposed modifications after the receipt of the information required to review the modifications, and if the Utility fails to respond within ten (10) Business Days, the modification(s) shall be considered to be approved by the Utility. When it is not reasonably possible for the Interconnection Customer to provide prior written notice of modifications, the Interconnection Customer shall provide written notice to the Utility as soon as reasonably possible after the modifications have been made.
- F) <u>Permits and Approvals:</u> The Interconnection Customer shall obtain all environmental and other permits lawfully required by governmental authorities prior to the construction of the Generating Facility. The Interconnection Customer shall also maintain these applicable permits and compliance with these permits during the term of this Agreement.

#### VII. INDEMNIFICATION AND LIMITATION OF LIABILITY

- A) The Interconnection Customer shall indemnify and hold harmless the Utility against all damages, expenses and other obligations to third parties attributable to the negligence, strict liability or intentional acts of the Interconnection Customer. The Utility shall indemnify and hold harmless the Interconnection Customer against all damages, expenses and other obligations to third parties attributable to the negligence, strict liability or intentional acts of the Utility. The terms "Utility" and "Interconnection Customer," for purposes of this indemnification provision, include their officers, directors, trustees, managers, members, employees, representatives, affiliates, successors and assigns.
- B) Except in the event of acts of willful misconduct, each Party's liability to the other Party for failure to perform its obligations under this Agreement, shall be limited to the amount of direct damage actually incurred. Neither Party shall be liable to the other Party for any punitive, incidental, indirect, special, or consequential damages of any kind whatsoever, including for loss of business opportunity or profits, regardless of whether such damages were foreseen.
- C) Notwithstanding any other provision in this Agreement, with respect to Utility's provision of electric service to any customer including the Interconnection Customer, the Utility's liability to such customer shall be limited as set forth in the Utility's tariffs and terms and conditions for electric service, and shall not be affected by the terms of this Agreement.

#### VIII. DISPUTE RESOLUTION

- A) Each party agrees to attempt to resolve all disputes arising hereunder promptly, equitably and in a good faith manner.
- B) In the event of a dispute, either party shall provide the other party with a written notice of dispute. Such notice shall describe in detail the nature of the dispute. The non-disputing party shall acknowledge the notice within three business days of its receipt and identify a representative with the authority to make decisions for the non-disputing party with respect to the dispute.
- C) If the dispute has not been resolved in eight business days for timeline related disputes or 20 business days for all other disputes after the receipt of the notice, the parties may, upon mutual agreement, seek resolution through the assistance of a dispute resolution service. The dispute resolution service will assist the parties in either resolving the dispute or in selecting an appropriate dispute resolution venue (e.g., mediation, settlement judge, early neutral evaluation, or qualified technical expert(s)) to assist the parties in resolving their dispute. Each party will be responsible for one-half of any costs paid to neutral third-parties.
- D) For any technical disputes, both parties shall have a qualified technical representative present in the attempts to resolve the dispute.
- E) If the dispute remains unresolved after 30 business days, either party may petition the commission to handle the dispute as a formal complaint or may exercise whatever rights and remedies it may have in equity or law.

## IX. INSURANCE

[This Section shall either state that "the Interconnection Customer is not required to

maintain insurance unless so ordered by the Commission for good cause upon the petition of a Utility" or, for Generating Facilities with Rated Capacity greater than 250 kW, the Utility may include the following provisions:

- A) The Interconnection Customer shall maintain, during the term of the Agreement, general liability insurance from a qualified insurance agency with a B+ or better rating by "Best" and with a combined single limit of not more than one million dollars (\$1,000,000). Such general liability insurance shall include coverage against claims for damages resulting from (i) bodily injury, including wrongful death; and (ii) property damage arising out of the Interconnection Customer's ownership and/or operation of the Generating Facility under this Agreement.
- B) The general liability insurance required by Section IX.A shall, by endorsement to the policy or policies, (a) include the Utility as an additional insured; (b) contain a severability of interest clause or cross-liability clause; (c) provide

- that the Utility shall not by reason of its inclusion as an additional insured incur liability to the insurance carrier for the payment of premium for such insurance; and (d) provide for thirty (30) calendar days written notice to the Utility prior to cancellation, termination, alteration, or material change of such insurance.
- C) The Interconnection Customer shall furnish the insurance certificates and endorsements required by Sections IX.A and IX.B to the Utility prior to the initial operation of the Generating Facility. Thereafter, the Utility shall have the right to periodically inspect or obtain a copy of the original policy or policies of insurance.
- D) The general liability insurance required by Section IX.A shall state that coverage provided is primary and is not excess to or contributing with any insurance or self-insurance maintained by the Utility.
- E) The Interconnection Customer may elect to self-insure rather than complying with Sections IX.A through IX.D if:
  - 1) The Interconnection Customer provides to the Utility, at least thirty (30) days prior to the date of initial operation, a plan reasonably acceptable to the Utility to self-insure to a level of coverage equivalent to that required under Section IX.A; and,
  - 2) The Interconnection Customer agrees to immediately obtain the coverage required under Section IX.A if the Interconnection Customer fails to comply with its self-insurance plan.
- F) Failure of the Interconnection Customer or Utility to enforce the minimum levels of insurance does not relieve the Interconnection Customer from maintaining such levels of insurance or relieve the Interconnection Customer of any liability.
- G) All insurance certificates, statements of self-insurance, endorsements, cancellations, terminations, alterations, and material changes of such insurance shall be issued and submitted to the following address:

[Utility] Attention:	Manager of Generation Insurance

#### X. MISCELLANEOUS

A) Force Majeure: Force majeure shall mean any cause beyond the control of the Party affected, including, but not limited to, failure of or threat of failure of facilities, flood, earthquake, tornado, storm, fire, lightning, epidemic, war, riot, civil disturbance or disobedience, [labor dispute, ] labor or material shortage, sabotage, restraint by court order or public authority, and action or non-action by or failure to obtain the necessary authorizations or approvals from any governmental agency or authority, which by exercise of due diligence such Party could not reasonably have been expected to avoid and which by exercise of due diligence, it shall be unable to overcome. If either Party, because of force majeure, is rendered wholly or partly unable to perform its obligations

under this Agreement, except for the obligation to make payments of money, that Party shall be excused from whatever performance is affected by the force majeure to the extent so affected, provided that:

- 1) the nonperforming Party, within a reasonable time after the occurrence of the force majeure, gives the other Party written notice describing the particulars of the occurrence;
- 2) the suspension of performance is of no greater scope and of no longer duration than is required by the force majeure; and
- 3) the nonperforming Party uses its best efforts to remedy its inability to perform. [This subparagraph shall not require the settlement of any strike, walkout, lockout or other labor dispute on terms which, in the sole judgment of the party involved in the dispute, are contrary to its interest. It is understood and agreed that the settlement of strikes, walkouts, lockouts or other labor disputes shall be entirely within the discretion of the Party involved in the disputes.]
- B) Notices: Any written notice, demand, or request required or authorized in connection with this Agreement shall be deemed properly given if delivered in person, sent by first class mail with postage prepaid, or sent by electronic mail as specified below:

1)	To the Utility:
	Email:
2)	To the Interconnection Customer:
	Email:

- 2) A Party may change its address for notices at any time by providing the other Party written notice of the change, in accordance with this Section.
- 3) The Parties may also designate operating representatives to conduct the daily communications, which may be necessary or convenient for the administration of this Agreement. Such designations, including names, addresses, phone numbers and electronic mail addresses may be communicated or revised by one Party's notice to the other Party.
- C) <u>Assignment:</u> The Interconnection Customer shall not assign its rights nor delegate its duties under this Agreement without the Utility's written consent.

- Any assignment or delegation the Interconnection Customer makes without the Utility's written consent shall not be valid. The Utility shall not unreasonably withhold its consent to the Generating Entities assignment of this Agreement.
- D) Non-waiver: None of the provisions of this Agreement shall be considered waived by a Party unless such waiver is given in writing. The failure of a Party to insist in any one or more instances upon strict performance of any of the provisions of this Agreement or to take advantage of any of its rights hereunder shall not be construed as a waiver of any such provisions or the relinquishment of any such rights for the future, but the same shall continue and remain in full force and effect.
- E) Governing Law and Inclusion of Utility's Tariffs and Rules:
  - 1) This Agreement shall be interpreted, governed and construed under the laws of the State of New Mexico as if executed and to be performed wholly within the State of New Mexico without giving effect to choice of law provisions that might apply to the law of a different jurisdiction.
  - 2) The interconnection and services provided under this Agreement shall at all times be subject to the terms and conditions set forth in the tariff schedules and Commission rules applicable to the electric service provided by the Utility, which tariff schedules and Commission rules are hereby incorporated into this Agreement by this reference.
  - 3) Notwithstanding any other provisions of this Agreement, the Utility shall have the right to unilaterally file with the Commission, pursuant to the Commission's rules and regulations, an application for change in rates, charges, classification, service, tariff or rule or any agreement relating thereto.
- F) <u>Amendment and Modification:</u> This Agreement can only be amended or modified by a writing signed by both Parties.
- G) Entire Agreement: This Agreement, including its Appendices, constitutes the entire Agreement between the Parties with regard to the interconnection of the Generating Facility of the Parties at the Point(s) of Common Coupling expressly provided for in this Agreement and supersedes all prior agreements or understandings, whether verbal or written. It is expressly acknowledged that the Parties may have other agreements covering other services not expressly provided for herein, which agreements are unaffected by this Agreement. Each Party also represents that in entering into this Agreement, it has not relied on the promise, inducement, representation, warranty, agreement or other statement not set forth in this Agreement or in the incorporated attachments and appendices.
- H) <u>Confidential Information</u>: Except as otherwise agreed or provided herein, each Party shall hold in confidence and shall not disclose confidential information, to any person (except employees, officers, representatives and agents, who agree to be bound by this section). Confidential information shall be clearly marked as such on each page or otherwise affirmatively identified. If a court, government agency or entity with the right, power, and authority to do so, requests or requires either Party, by subpoena, oral disposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose

confidential information, that Party shall provide the other Party with prompt notice of such request(s) or requirements(s) so that the other Party may seek an appropriate protective order or waive compliance with the terms of this Agreement. In the absence of a protective order or waiver the Party shall disclose such confidential information which, in the opinion of its counsel, the party is legally compelled to disclose. Each Party will use reasonable efforts to obtain reliable assurance that confidential treatment will be accorded any confidential information so furnished.

- I) Non-warranty: Neither by inspection, if any, or non-rejection, nor in any other way, does the Utility give any warranty, expressed or implied, as to the adequacy, safety, or other characteristics of any structures, equipment, wires, appliances or devices owned, installed or maintained by the Interconnection Customer or leased by the Interconnection Customer from third parties, including without limitation the Generating Facility and any structures, equipment, wires, appliances or devices appurtenant thereto.
- J) No Partnership: This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon either Party. Neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.

#### XI. SIGNATURES

Interconnection Customer

IN WITNESS WHEREOF, the Parties hereto have caused two originals of this Agreement to be executed by their duly authorized representatives. This Agreement is effective as of the last date set forth below.

By:		
Name:		
Title:		

	Date:
Utility	
	By:
	Name:
	Title:
Date:	

<u>###</u>

1575659.2

#### 1. GENERAL REVIEW OF THE PROCESS:

#### 1.1 Review Process:

This review process allows for rapid approval for the interconnection of those Generating Facilities that do not require an interconnection study. The review process includes a screening by the Utility to determine if a Supplemental Review is required. The general guidelines for the interconnection review process are shown in Table 1,

**Table 1 - General Guidelines for the Interconnection Process** 

Interconnection Review Process*	Application Type	Likely DG System Size
Simplified Interconnection Process	Simplified Application (See Exhibit 1A)	$0 \le 25 \text{kW}$
Fast Track Process with or without Supplemental Review	Standard Application (See Exhibit 1B)	$>25 \text{ kW \& } \leq 2.0 \text{ MW}$
Full Interconnection Study Process	Standard Application (See Exhibit 1B)	$>2.0 \text{ MW & } \leq 10 \text{ MW}$
Case Specific Study Process	Standard Application (See Exhibit 1B)	>10 MW

<sup>\*</sup>These guidelines are provided to indicate the review process that <u>most</u> applications will follow. The technical requirements in the screening process will determine which review process <u>must</u> be followed. Neither the type of application nor the system size <u>will guarantee</u> a specific interconnection review process.

## **1.2** Description of General Review Path:

The Utility shall utilize the interconnection screening process shown in Figure 1 that results in four general review paths for proposed interconnection of Generating Facilities:

- A. **Simplified Interconnection** For Certified Inverter-based Generating Facilities with a power rating of 25 kilowatts (kW) or less on radial or Network Systems under certain conditions;
- B. **Fast Track with or without Supplemental Review** For certified Generating Facilities that pass certain specified screens and likely would have a power rating of 2.0 megawatts (MW) or less, or
- C. **Full Interconnection Study** For Generating Facilities that have a power rating of 10 megawatts (MW) or less and do not qualify for the Simplified or Fast Track process.
- D. **Case Specific Review Process**: For Generating Facilities with a Rated Capacity greater than 10 megawatts (MW), which shall be conducted pursuant to 17.9.569 NMAC.

#### 1.3 Determinations for Further Review:

Failure to pass any screen of the review process means only that further review and/or studies are required before the Generating Facility can be approved to interconnect to the utility's Distribution System. It does <u>not</u> mean that the Generating Facility cannot be interconnected.

#### 1.4 Review Process Determination:

These guidelines are provided to indicate the review process that <u>most</u> applications will follow. The technical requirements in the screening process will determine which review process <u>must</u> be followed. Neither the type of application submitted nor the size of the Generating Facility <u>will guarantee</u> a specific interconnection review process.

# 2. UTILITY REVIEW FLOW CHART:

The flow charts provided in Figure 1 and 2 are illustrations of the review process to be used by the Utility to evaluate Interconnection Applications. Detail about the screens is described in Section 3, Screening Criteria.

FIGURE 1: UTILITY REVIEW PROCESS FOR INTERCONNECTION

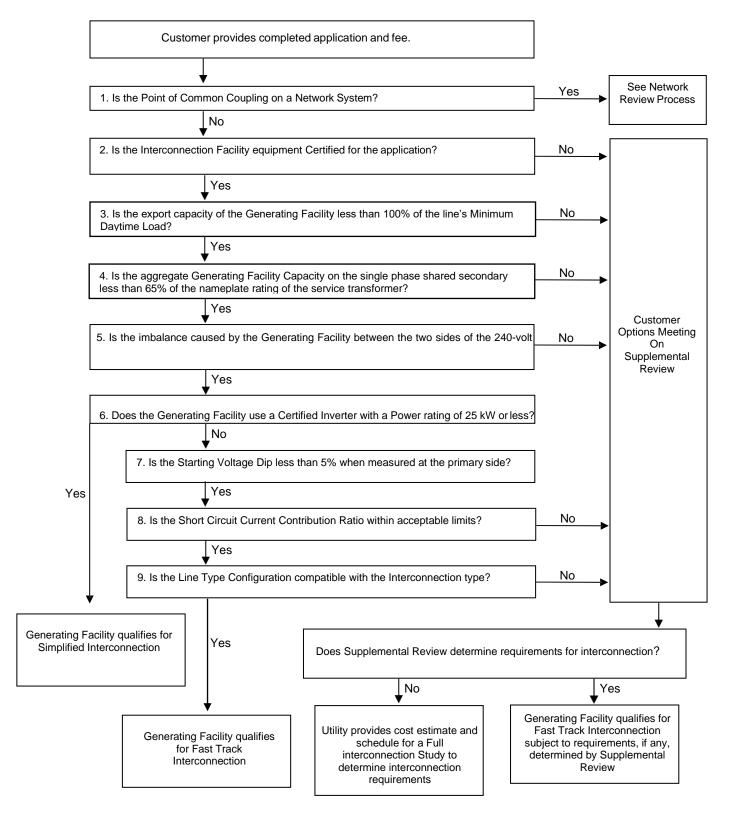
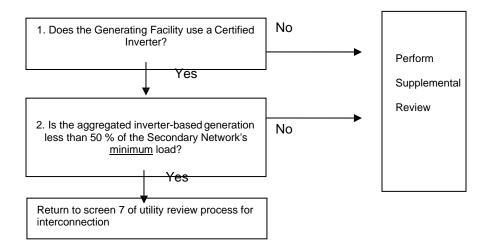


Figure 2: Utility Review Process for Interconnection to Network Systems



Screens 4 and 5 apply only to single-phase interconnections.

#### 3. SCREEN CRITERIA:

Utilities shall use the following screen criteria, as applicable, to evaluate Interconnection Applications.

## Screen 1: Is the Point of Common Coupling on a Network System?

- If Yes, the Utility will review the proposed interconnection to a Network System as shown in the flowchart in Figure 2.
- If No, continue to next screen.

The significance of Screen 1: Special considerations must be given to Generating Facilities proposed to be installed on networked Distribution Systems because of the design and operational aspects of network protectors. There are no such considerations for radial Distribution Systems

#### Screen 2: Is the Interconnection Facility equipment certified for the application?

- If Yes, continue to next screen.
- If No, the Generating Facility or Interconnection Facilities do not qualify for Simplified Interconnection. Perform Supplemental Review.

# Screen 3: Is the aggregate Generating Facility capacity on the Line Section less than 100% of Line Section minimum daily load?

- If Yes, continue to next screen.
- If No, the Generating Facility does not qualify for Simplified Interconnection.

Perform Supplemental Review to determine cumulative impact on Line Section.

- A. For interconnection of a proposed Generating Facility to a distribution circuit, the "aggregate Generation Facility capacity" includes the proposed Generating Facility but excludes generation that does not run in parallel with the utility for greater than 10 minutes.
- B. For interconnection of a proposed Generating Facility to a distribution circuit, the "aggregate Generation Facility capacity", including the proposed Generating Facility, on the Line Section shall not exceed 100% of the Line Section's Minimum Daytime loading as most recently measured at the substation or calculated for the Line Section.
- C. For Highly Seasonal Circuits only, the "aggregate Generation Facility capacity", including the proposed Generating Facility, on the Line Section shall not exceed 100% of two times the Minimum Daytime Loading.

*The significance of Screen 3:* 

- 1. Low penetration of Generating Facility installations will have a minimal impact on the operation and load restoration efforts of the utility's Distribution System.
- 2. The operating requirements for a high penetration of Generating Facilities may be different since the impact on utility's Distribution System will no longer be minimal and, therefore, require additional study or controls.
- 3. In Line Sections that are not highly seasonal, there will be minimal impact on the operation and load restoration efforts of the utility's Distribution System when aggregate Generating Facility capacity is less than 100% of the Minimum Daytime Loading.. For penetration in excess of 100%, the impact on the utility's Distribution System operating requirements may no longer be minimal, and therefore, may require additional study.
- 4. Highly Seasonal Circuits include those with heavy irrigation loads in the summer or snowmaking loads in the winter. In Highly Seasonal Circuits, the 100% of Line Section Minimum Daytime Loading criterion could result in aggregate Generating Facility capacity exceeding load on the Line Section at times. Therefore, a lower threshold is applied for Highly Seasonal Circuits.
- 5. Aggregate Generating Facility capacity does not include generators that rarely run in parallel with the utility's Distribution System, such as back-up and emergency generators, because those generators have minimal impact on the Distribution System.

# Screen 4: For single phase interconnections only -- Is the aggregate generation capacity on the Shared Secondary, including the proposed Generating Facility, less than 65 % of the nameplate rating of the service transformer?

- If Yes, continue to next screen.
- If No, the Generating Facility does not qualify for Simplified Interconnection. Perform Supplemental Review.

If the proposed Generating Facility is to be interconnected on a single-phase Shared Secondary, the aggregate Generating Facility capacity on the Shared Secondary, including the proposed Generating Facility, shall not exceed 65% of the transformer nameplate rating.

# Screen 5: For single phase interconnections only -- Is the imbalance between the two sides of the 240 volt service less than 20% of the nameplate rating of the service transformer?

- If Yes, continue to next screen.
- If No, the Generating Facility does not qualify for Simplified Interconnection. Perform Supplemental Review.

If the proposed Generating Facility is single-phase and is to be interconnected on a center tap of a 120/240 volt service, its addition shall not create an imbalance between the two sides of the 240 volt service of more than 20% of the nameplate rating of the service transformer.

# Screen 6: Does the Facility use a Certified Inverter with a capacity rating of 25 kW or less?

- If Yes, the Generating Facility qualifies for Simplified Interconnection. Skip remaining screens.
- If No, continue to next screen.

# Screen 7: Is the starting voltage dip less than 5% and have the flicker requirements of IEEE 1547-2018 been met?

- If Yes, continue to next screen.
- If No, perform Supplemental Review.

The Generating Facility must conform with two tests to pass Screen 7.

- 1. The first test is for starting voltage dip. The Utility has two options for determining whether the starting voltage dip is acceptable. The option to be used is at the Utility's discretion:
  - a. Option 1: The Utility may determine that the Generating Facility's starting in-rush current is equal to or less than the continuous ampere rating of the Interconnection Customer's service equipment.
  - b. Option 2: The Utility may determine the impedances of the service distribution transformer (if present) and the secondary conductors to the Interconnection Customer's service equipment and perform a voltage dip calculation. Alternatively, the Utility may use tables or nomographs to determine the voltage dip. Voltage dips caused by starting a Generating Facility must be less than 5%, when measured at the primary side (high side) of a dedicated distribution transformer serving the Generating Facility, for primary interconnections. The 5% voltage dip limit applies to the distribution transformer low side if the low side is shared with other customers and to the high side if the transformer is dedicated to the Interconnection Customer.
- 2. The second test is conformance with the relationship between voltage fluctuation and starting frequency presented in the table for flicker requirements in IEEE 1547-2018.

*The significance of Screen 7:* 

- 1. This Screen addresses potential voltage fluctuation problems that may be caused by Generating Facilities that start by motoring or large induction generators.
- 2. When starting, the Generating Facility should have minimal impact on the service voltage to other utility customers.

3. Properly designed inverter-based Generating Facilities should conform with the requirements of this screen.

## Screen 8: Is the Short Circuit Current Contribution Ratio within acceptable limits?

- If Yes, continue to next screen.
- If No, Perform Supplemental Review.

Screen 8 consists of two criteria; both of which must be met when applicable:

- 1. When measured at the primary side (high side) of a dedicated distribution transformer serving a Generating Facility, the sum of the Short Circuit Current Contribution Ratios of all Generating Facilities connected to utility's Distribution System circuit that serves the Generating Facility must be less than or equal to 0.1, and
- 2. When measured at the secondary side (low side) of a shared distribution transformer, the short circuit current contribution of the proposed Generating Facility must be less than or equal to 2.5% of the interrupting rating of the Generating Facility's service equipment. Total fault current cannot exceed interrupting capability of service equipment.

The significance of Screen 8: If the Generating Facility passes this screen it should have minimal impact on the utility Distribution System's short circuit duty, fault detection sensitivity, relay coordination or fuse-saving schemes.

## Screen 9: Is the Line Type Configuration compatible with the interconnection type?

- If Yes, the Generating Facility qualifies for Fast Track Interconnection.
- If No, Perform Supplemental Review.

The purpose of Screen 9 is to identify the primary distribution line configuration that will serve the Generating Facility. Based on the type of interconnection to be used for the Generating Facility, the utility will determine from Table 2 if the proposed Generating Facility passes the screen.

Table 2

Primary Distribution Line Type Configuration	Type of Interconnection to be Made to Primary Distribution Line	Results/Criteria	
Three-phase, three wire	Any type	Pass Screen	
Three-phase, four wire	Single-phase, line-to-neutral	Pass Screen	
Three-phase, four wire (For any line that has such a section OR mixed three wire and four wire)	All others	To pass, aggregate GF Nameplate Rating must be less than or equal to 10% of Line Section peak load	

The significance of Screen 9: If the primary distribution line serving the Generating Facility is of a "three-wire" configuration, or if the Generating Facility's distribution transformer is single-phase and connected in a line-to-neutral configuration, then there is no concern about overvoltages to the utility's, or other customers' equipment caused by loss of system neutral grounding during the operating time of the non-islanding protective function.

#### 6. **NETWORK SCREENING PROCESS:**

Notwithstanding Network Screens 1-2 below, each Utility may incorporate into its interconnection standards, any change in interconnection guidelines related to Network Systems pursuant to standards developed under IEEE 1547-2018 and subparts when applicable for interconnections to Network Systems. To the extent the new IEEE standards or guides conflict with the interconnection standards set forth in this Section 3, the new standards or guides shall apply.

## **Network Screen 1: Does the Generating Facility use a Certified Inverter?**

- If Yes, continue to next screen.
- If No, the Generating Facility does not qualify for Simplified Interconnection. Perform Supplemental Review.

# Network Screen 2: Is the aggregated inverter-based generation less than 50% of the Secondary Network's minimum load?

- If Yes, the Generating Facility qualifies for Fast Track Process.
- If No, the Generating Facility does not qualify for Fast Track Process. Perform Supplemental Review.

The significance of Network Screen 2: For interconnection of a proposed Generating Facility to the load side of network protectors, the proposed Generating Facility must utilize an inverter-based equipment package and, together with the aggregated other inverter-based generation, shall not exceed 50% of the Secondary Network's minimum load.

#### BEFORE THE NEW MEXICO PUBLIC REGULATION COMMISSION

IN THE MATT	CER OF A I	RULEMAK	ING TO REPEAL	)	
AND REPLACE	E COMMIS	SION RUL	E 17.9.568 NMAC,	)	
INTERCONNE	CTION STA	ANDARDS	FOR ELECTRIC	)	<b>Docket No. 21-00266-UT</b>
UTILITIES,	AND	THE	ASSOCIATED	)	
INTERCONNE	CTION MA	NUAL		)	

## **CERTIFICATE OF SERVICE**

**I CERTIFY** that on this date I served upon the following parties, via email only, a true and correct copy of the Final Order.

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Roosevelt County Electric

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Tri-State Generation and Transmission

Western Farmers Electric

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Maj Scott Kirk

Capt Robert L. Friedman

TSgt Ryan Moore WRA - Steve Michel CCAE- Charles Noble CCAE-Megan O'Reilly

Prosperity Works- Ona Porter

Dahl Harris

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EJ-Charles Carter Hall

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