

Michigan Office of Administrative Hearings and Rules

Administrative Rules Division (ARD)

611 W. Ottawa Street

Lansing, MI 48909

Phone: 517-335-8658 Fax: 517-335-9512

**REGULATORY IMPACT STATEMENT
and COST-BENEFIT ANALYSIS (RIS)**

Agency Information:

Department name:

Licensing and Regulatory Affairs

Bureau name:

Public Service Commission

Name of person filling out RIS:

Lisa Gold

Phone number of person filling out RIS:

517-420-2291

E-mail of person filling out RIS:

goldl@michigan.gov

Rule Set Information:

ARD assigned rule set number:

2020-96 LR

Title of proposed rule set:

Interconnection and Distributed Generation Standards

Comparison of Rule(s) to Federal/State/Association Standard

1. Compare the proposed rules to parallel federal rules or standards set by a state or national licensing agency or accreditation association, if any exist.

Interconnection standards are rules that detail how projects owned by customers, developers, and in some situations, the utility, connect to the utility distribution system. These rules provide a standardized process and schedule so that interconnections can be accommodated in an orderly and timely manner. The rules also ensure that interconnections are done reliably and safely, in order to protect workers, utility and third-party owned equipment, and the public.

The Interconnection and Distributed Generations Standards rules are comparable, in part, to the Federal Energy Regulatory Commission's Small Generator Interconnection Procedures (SGIP), 145 FERC ¶ 61,159, which the Michigan Public Service Commission (Commission or MPSC) relied upon as a guide to drafting the Interconnection and Distributed Generation Standards rules. The SGIP applies to small generating facilities seeking interconnection with an electrical transmission provider. The SGIP similarly are intended to ensure interconnection time and costs are just and reasonable, prevent undue discrimination, and ensure safety and reliability. Like the Interconnection and Distributed Generation Standards rules, the SGIP contains pre-application and application procedures, a Fast Track process and eligibility requirements, and screening and study processes. The Interconnection and Distributed Generation Standards are also comparable to the Minnesota Distributed Energy Resource Interconnection Process and Minnesota Technical Interconnection and Interoperability Requirement, which were also relied upon as a guide in drafting the rules. The Minnesota interconnection standards similarly relied upon the federal SGIP as a guide. The SGIP and Minnesota interconnection standards, however, are not duplicative of the Interconnection and Distributed Generation Standards because of the jurisdiction to which they apply.

The Institute for Electrical and Electronics Engineers (IEEE) has also promulgated technical standards and specifications for, and testing of, the interconnection and interoperability between electric utility electric power systems and distributed energy resources (DER) relevant to performance, operation, testing, safety, and maintenance of the interconnection. These standards and specifications, are contained in IEEE 1547-2018-IEEE Standard for Interconnection and Interoperability of Distributed Energy Resources with Associated Electric Power Systems Interfaces and IEEE 1547.1-2020- IEEE Standard Conformance Test Procedures for Equipment Interconnecting Distributed Energy Resources with Electric Power Systems and Associated Interfaces. These IEEE standards are adopted by reference in the Interconnection and Distributed Generation Standards rules. The IEEE standards are technical standards that are not duplicative of or in conflict with the instant rules.

A. Are these rules required by state law or federal mandate?

These rules are promulgated pursuant to authority conferred upon the Commission by section 7(6) of 1909 PA 106, MCL 460.557(6); section 5 of 1919 PA 419, MCL 460.55; sections 4, 6(1), and 10e(3) of 1939 PA 3, MCL 460.4, 460.6(1); and 460.10e(3), and section 173(1) of 2008 PA 295, MCL 460.1173(1)). Section 173(1) of 2008 PA 295, MCL 460.1173(1) provides: “The Commission shall establish a distributed generation program by order issued not later than 90 days after the effective date of the 2016 act that amended this section. The Commission may promulgate rules the Commission considers necessary to implement this program. Any rules adopted regarding time limits for approval of parallel operation shall recognize reliability and safety complications including those arising from equipment saturation, use of multiple technologies, and proximity to synchronous motor loads. The program shall apply to all electric utilities whose rates are regulated by the Commission and alternative electric suppliers in this state.”

And, MCL 460.10e(3) provides: “The commission shall establish standards for the interconnection of merchant plants with the transmission and distribution systems of electric utilities. The standards shall not require an electric utility to interconnect with generating facilities with a capacity of less than 100 kilowatts for parallel operations. The standards shall be consistent with generally accepted industry practices and guidelines and shall be established to ensure the reliability of electric service and the safety of customers, utility employees, and the general public. The merchant plant will be responsible for all costs associated with the interconnection unless the commission has otherwise allocated the costs and provided for cost recovery.”

The Commission promulgated the Electric Interconnection and Net Metering Standards in 2009 by the authority conferred on the Public Service Commission by section 6 of 1909 PA 106, MCL 460.556, section 5 of 1919 PA 419, MCL 460.55, sections 4, 6, and 10e of 1939 PA 3, MCL 460.4, 460.6, and 460.10e, and section 173 of 2008 PA 295, MCL 460.1173. The instant rules, the Interconnection and Distributed Generation Standards, are an update to the Electric Interconnection and Net Metering Standards necessitated by advances in distributed energy resource (DER) technology and an increase in distributed generation penetration on the distribution systems in Michigan. The Interconnection and Distributed Generation Standards are promulgated pursuant to the same authority as, and replace, the Electric Interconnection and Net Metering Standards, which will be rescinded concurrently with the approval of these rules.

The federal Public Utility Regulatory Policies Act of 1978 (PURPA), also requires state regulatory authorities to promulgate rules for qualifying cogeneration and qualifying small power producers. Specifically, 16 USC 824a-3(f) (1) states: “Beginning on or before the date one year after any rule is prescribed by the Commission under subsection (a) or revised under such subsection, each State regulatory authority shall, after notice and opportunity for public hearing, implement such rule (or revised rule) for each electric utility for which it has ratemaking authority.” This subsection refers to the requirement to promulgate rules to encourage cogeneration and small power production producers in the sale and purchase of electric energy from such facilities by electric utilities.

B. If these rules exceed a federal standard, please identify the federal standard or citation, describe why it is necessary that the proposed rules exceed the federal standard or law, and specify the costs and benefits arising out of the deviation.

The Interconnection and Distributed Generation Standards rules do not exceed federal, national, or regional compliance requirements or other standards.

2. Compare the proposed rules to standards in similarly situated states, based on geographic location, topography, natural resources, commonalities, or economic similarities.

The Interconnection and Distributed Generation Standards rules are similar to the interconnection standards adopted in Minnesota in that the Minnesota standards include pre-application and application processes, a simplified and fast track processes and eligibility standards, and screening and study procedures. The MPSC used the Minnesota rules as a guide, because Minnesota is a midwestern state with similar geography and weather, and is a fellow member of the same regional transmission organization, the Midcontinent Independent System Operator, Inc. (MISO). The Interconnection and Distributed Generation Standards do not exceed the rules or standards in other similarly situated states. The proposed rules are also similar to the interconnection rules in Ohio and Illinois. All of these regulations include a pre-application report, different levels of study, and review screens.

A. If the rules exceed standards in those states, please explain why and specify the costs and benefits arising out of the deviation.

The Interconnection and Distributed Generation Standards do not exceed the standards of similarly situated states.

3. Identify any laws, rules, and other legal requirements that may duplicate, overlap, or conflict with the proposed rules.

The Commission is not aware of any laws, rules, and other legal requirements that duplicate, overlap, or conflict with the Interconnection and Distributed Generation Standards rules.

A. Explain how the rules have been coordinated, to the extent practicable, with other federal, state, and local laws applicable to the same activity or subject matter. This section should include a discussion of the efforts undertaken by the agency to avoid or minimize duplication.

The Commission is not aware of any other federal, state, or local laws that have jurisdiction over the interconnection of distributed energy resources to Michigan electric providers' distribution systems.

4. If MCL 24.232(8) applies and the proposed rules are more stringent than the applicable federally mandated standard, provide a statement of specific facts that establish the clear and convincing need to adopt the more stringent rules.

MCL 24.232(8) does not apply, and the Commission is not aware of any federal standard applicable to the interconnection of distributed energy resources to Michigan electric providers' distribution systems.

5. If MCL 24.232(9) applies and the proposed rules are more stringent than the applicable federal standard, provide either the Michigan statute that specifically authorizes the more stringent rules OR a statement of the specific facts that establish the clear and convincing need to adopt the more stringent rules.

The Commission is not aware of any federal standard applicable to the interconnection of distributed energy resources to Michigan electric providers' distribution systems.

Purpose and Objectives of the Rule(s)

6. Identify the behavior and frequency of behavior that the proposed rules are designed to alter.

Section 173 of Public Act 295 of 2008, MCL 460.1173(1) (Act 295), authorized the Commission to promulgate administrative rules governing net metering standards. In 2009, the Commission formally adopted administrative rules governing electric interconnection and net metering. See, Mich Admin Code, R 460.601a-460.656. Those rules focused primarily on small electric generators by dividing them into five categories; the first four categories apply to projects up to 2 megawatts (MWs) and the fifth category applies to projects greater than 2 MWs. In the December 20, 2012 order in Case No. U-15919, the Commission adopted procedures for interconnection of smaller projects (Categories 1 and 2).

The Commission now needs to update the interconnection procedures for smaller projects (Categories 1 and 2) and adopt procedures governing the interconnection of larger projects (Categories 3 through 5).

Since 2009, there have been significant changes in Michigan's energy landscape driven by rapidly advancing renewable energy technology. There have also been changes in Michigan's energy laws with the passage of Public Acts 341 and 342 of 2016, which, among other things, amended Act 295. MCL 460.1173(1) now authorizes the Commission to promulgate rules governing distributed generation (DG). See also, MCL 460.1173(6)(b). Likewise, the Institute of Electrical and Electronics Engineers (IEEE) recently updated its technical standards for interconnection, the IEEE Standard for Interconnection and Interoperability of Distributed Energy Resources with Associated Electric Power Systems Interfaces (IEEE 1547-2018), which has prompted other states to revise their own interconnection rules and standards, and even more recently adopted IEEE 1547.1-2020, the IEEE Standard Conformance Test Procedures for Equipment Interconnecting Distributed Energy Resources with Electric Power System Interfaces. Moreover, the Federal Energy Regulatory Commission (FERC) has recently addressed the integration of energy storage facilities in its Order 841 issued on February 15, 2018, which directs regional transmission organizations and independent system operators to establish market rules for energy storage facilities to participate in wholesale energy, capacity, and ancillary services markets. Order 841, 162 FERC ¶ 61, 127; 18 CFR 35.28 (2018).

Finally, in the October 27, 2015 order in Case No. U-17973, the Commission determined that it needed to update the standards applicable to utilities and qualifying facilities (QF) operating pursuant to the Public Utility Regulatory Policies Act of 1978, 16 USC 2601 et seq., 16 USC 824a-3 (PURPA). PURPA was enacted by Congress in 1978 to increase energy conservation and energy efficiency by allowing for renewable resources to interconnect with and sell their generation to utilities. PURPA is largely carried out by the states. 16 USC 2621(b)(2); 16 USC 824a-3(f). For example, the rates paid to QFs are set by the Commission. 16 USC 824a-3; MCL 460.6j(13)(b).

Thus, both PURPA and the new DG law (as well as the legacy net metering law) concern the topic of interconnection with the energy grid. Industry standards for interconnection have been updated since the 2009 rulemaking (thus requiring an update to the Commission's rules), and the current rules for larger generators are not sufficiently detailed or are nonexistent. In this rulemaking, the Commission is rescinding the 2009 interconnection rules (which are now outdated) and promulgating new rules addressing interconnection requirements for generators of all sizes, along with DG standards, to address the concerns described herein. In the November 18, 2018 order in Case No. U-20344, the Commission initiated a collaborative process with stakeholders to initiate this rulemaking effort. The new rules will govern the interconnection of larger projects, revamp interconnection rules for smaller projects, and decrease the time required to interconnect a distributed energy project into the electric distribution system.

The rules provide detailed instructions and standards for projects owned by customers or developers interconnecting to an electric utility's distribution system. These rules provide a number of improvements and updates to the 2009 interconnection rules. First, the rules set out a standardized process and schedule, including a fast track process for eligible projects, so that interconnections can be accommodated in an orderly and timely manner and in a manner that prevents unnecessary delay and undue discrimination. Second, the rules include a study process and a batch study process that effectively manages the study process, that can be complex when dealing with a number of interconnections at once. Third, the rules define communication, legal, and other obligations of both the utility and the interconnection applicant. Fourth, the rules provide avenues for conflict resolution to address issues efficiently and effectively and reduce the number of complaints filed with the Commission. Lastly, the rules also ensure that interconnections are done safely, in order to protect workers, utility and third-party owned equipment, and the public.

A. Estimate the change in the frequency of the targeted behavior expected from the proposed rules.

Under the existing rules governing interconnections, see Mich Admin Code R 460.601 et seq. (the subject of 2020-95), the process to interconnect customer or developer projects to the utility system can be untimely and include unexpected costs for interconnection studies and equipment due to the lack of standards set out in the rules that determine the schedule for interconnection and that set costs or maximum costs. It is not possible to determine the exact frequency of the targeted behavior the rules will change because the frequency is tied to the number of interconnections sought from the electric utilities. However, the Generator Interconnection Report provided by Consumers Energy Company on its interconnection website, which lists 1,820 interconnection projects in various stages of the interconnection process (including completed interconnection), demonstrates the volume of interconnections recently experienced by a large Michigan electric utility. Smaller electric utilities will not experience similar high volumes. The Interconnection and Distributed Generation Standards rules, once approved, would govern all interconnections made with Commission-regulated investor-owned and cooperative electric providers.

Consumers Energy Company's Generator Interconnection Report is available here:

<https://www.consumersenergy.com/-/media/CE/Documents/renewables/generator-interconnection/generator-interconnection-status-report.ashx?la=en&hash=DB1CC52718ADDCBD43ECCE8C6909DE38>

B. Describe the difference between current behavior/practice and desired behavior/practice.

Under the existing rules governing interconnections, see Mich Admin Code R 460.601 et seq., (2020-95) the process to interconnect customer or developer projects to the utility system can be untimely and include unexpected costs for interconnection studies and equipment due to the lack of standards set out in the rules that determine the schedule for interconnection and that set costs or maximum costs. In a connected rulemaking, 2020-95, the MPSC is rescinding the existing interconnection rules. The Interconnection and Distributed Generation Standards rules seek to minimize undue delay and uncertainty regarding timing in the interconnection process by providing an interconnection schedule, as well as a simplified and fast track process for eligible projects, and streamlined screening and study processes. Additionally, the rules set out cost caps and require transparency by the electric utility in setting interconnection costs.

C. What is the desired outcome?

With the Interconnection and Distributed Generation Standards rules, the Commission seeks to increase transparency and minimize uncertainty and discriminatory barriers in the timing, cost, and process for interconnecting distributed generation and developer projects to the utility's distribution system in a manner that ensures safety and reliability. The rules are expected to streamline the interconnection process, to facilitate better communication and transparency between the electric utility and interconnection applicant, and to increase clarity and fairness in the process.

7. Identify the harm resulting from the behavior that the proposed rules are designed to alter and the likelihood that the harm will occur in the absence of the rule.

As noted previously, under the existing rules governing interconnections, see Mich Admin Code R 460.601 et seq., (2020-95) the process to interconnect customer or developer projects to the utility system can be untimely and include unexpected costs for interconnection studies and equipment due to the lack of standards set out in the rules that determine the schedule for interconnection and that set costs or maximum costs. An interconnection process with unpredictable timing, potential unexpected costs, and ambiguity can inhibit the ability of a distributed generation customer or developer to interconnect to the electric utility's distribution system by making the project uneconomical. Additionally, these issues can lead to costly and protracted litigation between the electric utility and the interconnection applicant. These problems have the potential to discourage distributed generation and the interconnection of non-utility generation project which would deprive Michigan utility customers of the benefits DER can bring to the utility distribution system. Further, discouraging distributed generation and interconnection is contrary to the Michigan Legislature's intent to facilitate and encourage interconnection and distributed generation as evidenced by 2008 PA 295, 2016 PA 341, and 2016 PA 342.

A. What is the rationale for changing the rules instead of leaving them as currently written?

The Interconnection and Distributed Generation Standards rules are a new rule set. The current rules, Mich Admin Code R 460.601 et seq., will be rescinded concurrently with the approval of the Interconnection and Distributed Generation Standards rules in 2020-95 (the instant rulemaking is 2020-96). The legacy net metering rules are outdated at this time.

8. Describe how the proposed rules protect the health, safety, and welfare of Michigan citizens while promoting a regulatory environment in Michigan that is the least burdensome alternative for those required to comply.

The Interconnection and Distributed Generation Standards rules provide details regarding the eligibility and requirements for projects seeking to interconnect with the utility's distribution system and provide an appropriate screening and study process to ensure that the proposed interconnection project can be safely and reliably interconnected to the grid. These measures ensure that Michigan utility customers can rely on the safe and reliable delivery of electricity to their homes and businesses. Additionally, the rules provide for increased transparency in the timing, cost, and process for safely interconnecting generation projects to the utility's distribution system in a streamlined and unambiguous manner. This improved process will facilitate faster, safer interconnection that will allow for more interconnection projects to interconnect with the utility distribution system and provide additional economic, reliability, and environmental benefits to Michigan utility customers. The Interconnection and Distributed Generation Standards rules were developed using existing federal standards as well the standards of Minnesota, a similarly situated state, as a guide, and do not impose a regulatory burden on Commission-regulated electric utilities that is excessive or overly burdensome. Rather, the rules seek to eliminate the barriers to interconnection presented to both the electric utility and interconnection applicants by the current interconnection rules that do not provide a clear, streamlined process.

9. Describe any rules in the affected rule set that are obsolete or unnecessary and can be rescinded.

The Interconnection and Distributed Generation Standards rules are a new rule set. The current interconnection rules, Mich Admin Code R 460.601 et seq., (2020-95) will be rescinded concurrently with the approval of the Interconnection and Distributed Generation Standards rules.

Fiscal Impact on the Agency

Fiscal impact is an increase or decrease in expenditures from the current level of expenditures, i.e. hiring additional staff, higher contract costs, programming costs, changes in reimbursements rates, etc. over and above what is currently expended for that function. It does not include more intangible costs for benefits, such as opportunity costs, the value of time saved or lost, etc., unless those issues result in a measurable impact on expenditures.

10. Please provide the fiscal impact on the agency (an estimate of the cost of rule imposition or potential savings for the agency promulgating the rule).

The Commission anticipates some costs associated with the requirement set forth in the Interconnection and Distributed Generation for the electric utilities, within 30 business days of the effective date of the rules, to submit to the Commission interconnection procedures and forms. R 460.920(1). The rule then states that, "The commission shall issue its order approving, rejecting, or modifying the proposed interconnection procedures and forms within 360 days of the effective date of these rules. If the commission finds the procedures and forms proposed by the electric utility to be inadequate or unacceptable, the commission may adopt procedures and forms proposed by another party in the proceeding or modify and accept the procedures and forms proposed by the electric utility." R. 460.920(2). The review and procedure approving, rejecting, or modifying the proposed interconnection procedures and forms will result in some moderate costs incurred by the Commission in terms of staffing and overhead costs.

However, the Commission anticipates that the savings associated with the rules will offset any costs incurred as a result of the rules. The Interconnection and Distributed Generation Standards rules provide clear directives for the interconnection process, include communication instructions, clarify costs and cost responsibilities as well as other obligations for both the electric utility and interconnection or distributed generation applicant, streamline the interconnection process, and minimize uncertainty. The Commission expects that the improved rules will result in a reduced workload for the Commission staff and Commission in terms of addressing problems raised by the electric utilities and interconnection applicants as well as addressing formal and informal complaints. With the increasing volume of interconnections anticipated in the coming years as renewable energy technology prices continue a general decreasing trend, the Commission anticipates these savings to far exceed the costs incurred.

11. Describe whether or not an agency appropriation has been made or a funding source provided for any expenditures associated with the proposed rules.

An agency appropriation has not been made and a funding source has not been provided for any expenditures associated with the Interconnection and Distributed Generation Standards rules.

12. Describe how the proposed rules are necessary and suitable to accomplish their purpose, in relationship to the burden(s) the rules place on individuals. Burdens may include fiscal or administrative burdens, or duplicative acts.

The Interconnection and Distributed Generation rules require Commission-regulated utilities to comply with the interconnection schedules, communication and cost transparency requirements, study processes and all other provisions of the rules. Compliance will require the electric utilities, among other things, to develop and submit to the Commission interconnection procedures and forms within 30 business days of the effective date of the rules, see, R 460.920; allow for and facilitate the submission of pre-application report requests, applications, and interconnection agreements electronically, see, R 460.922; designate and make available an interconnection coordinator, see, R 460.924; and maintain a public interconnection list available on the electric utility's website (for electric utilities that receive more than 100 interconnection applications in a year), see, R 460.938. The rules also require electric utilities to determine and provide detailed cost information associated with the various stages of the interconnection process, provide information to applicants regarding interconnection activities, provide pre-application reports when requested and paid for by applicants, closely track the status of interconnection projects, and incorporate new interconnection study processes and techniques into the utility's procedures.

The Commission finds that the burden of these requirements, among others in the rules, are reasonable and necessary to accomplish a streamlined, transparent, and clear interconnection process that minimizes delay, unexpected costs, and undue discrimination. The requirements imposed on electric utilities do not extend beyond what is necessary to provide the information necessary to interconnection applicants to fulfill the statutory obligations set out in MCL 460.10e and MCL 460.1173.

A. Despite the identified burden(s), identify how the requirements in the rules are still needed and reasonable compared to the burdens.

The requirements imposed on electric utilities by the Interconnection and Distributed Generation Standards rules are reasonable and necessary to improve upon the current interconnection process and create a streamlined interconnection process capable of managing the increase in interconnection requests from distributed energy resources. The rules increase transparency in the timing, costs, and process for safely and reliably interconnecting projects to the electric utility's distribution system.

Impact on Other State or Local Governmental Units

13. Estimate any increase or decrease in revenues to other state or local governmental units (i.e. cities, counties, school districts) as a result of the rule. Estimate the cost increases or reductions for other state or local governmental units (i.e. cities, counties, school districts) as a result of the rule. Include the cost of equipment, supplies, labor, and increased administrative costs in both the initial imposition of the rule and any ongoing monitoring.

The Commission is not aware of any increase or decrease in revenues to other state or local governmental units as a result of the rules.

14. Discuss any program, service, duty, or responsibility imposed upon any city, county, town, village, or school district by the rules.

The Interconnection and Distributed Generation Standards rules do not impose any requirements on any city, county, town, village, or school district.

A. Describe any actions that governmental units must take to be in compliance with the rules. This section should include items such as record keeping and reporting requirements or changing operational practices.

The Interconnection and Distributed Generation Standards rules do not require any compliance actions by any governmental unit.

15. Describe whether or not an appropriation to state or local governmental units has been made or a funding source provided for any additional expenditures associated with the proposed rules.

The Commission is not aware of any appropriation to state or local governmental units or funding source associated with the Interconnection and Distributed Generation Standards rules.

Rural Impact

16. In general, what impact will the rules have on rural areas?

The Interconnection and Distributed Generation Standards rules will not have an impact on rural areas. Any potential impact on rural areas will not be a direct result of the rules, but rather, may include an increase in distributed energy resource development in rural areas due to improvements to the interconnection process that the Commission is aiming to achieve with these rules. The Commission is aware of some interconnection applicants that are planning for interconnection projects in rural areas of the state. Interconnection applicants could include solar and wind energy developers, and homeowners wishing to install a distributed energy resource.

A. Describe the types of public or private interests in rural areas that will be affected by the rules.

There are no public or private interests in rural areas that will be affected by the rules. As noted previously, there is no direct impact on rural areas included in the rules, but the rules aim to improve and streamline the interconnection process which, in turn, could lead to an increase in the number of interconnection projects in the state. The Commission is aware of some interconnection applicants with projects planned for development in rural areas. In those instances, the potential public and private interests could include permitting, local zoning, land acquisition, and potential contracting opportunities in the development of these projects.

Environmental Impact

17. Do the proposed rules have any impact on the environment? If yes, please explain.

The Interconnection and Distributed Generation Standards rules facilitate interconnection of distributed energy resources onto electric utilities' distribution systems and as a result, development of distributed energy resource projects may require siting permits for construction. Other potential indirect environmental impacts of the rules result from the possible increase in interconnection of distributed energy resources, many of which are renewable energy resources like solar, that reduce reliance on traditional fossil fuel generation and therefore, reduce emissions from such fossil fuel generation facilities. Reductions in emissions improve air quality and reduce greenhouse gas contributions.

Small Business Impact Statement

18. Describe whether and how the agency considered exempting small businesses from the proposed rules.

The Interconnection and Distributed Generation Standards rules do not impose any requirements on small businesses, but rather impose requirements on electric providers subject to the Commission's jurisdiction. According to MCL 24.207a, a small business is "a business concern incorporated or doing business in this state, including the affiliates of the business concern, which is independently owned and operated and which employs fewer than 250 full-time employees or which has gross annual sales of less than \$6,000,000.00." The electric providers subject to the Commission's jurisdiction, which include investor owned utilities and cooperative electric utilities, do not fit this definition of small business. The Commission does not regulate solar or wind energy developers.

19. If small businesses are not exempt, describe (a) the manner in which the agency reduced the economic impact of the proposed rules on small businesses, including a detailed recitation of the efforts of the agency to comply with the mandate to reduce the disproportionate impact of the rules upon small businesses as described below (in accordance with MCL 24.240(1)(a-d)), or (b) the reasons such a reduction was not lawful or feasible.

The Interconnection and Distributed Generation Standards rules do not impose a disproportionate impact on small businesses. The rules will benefit interconnection applicants, some of whom may qualify as small businesses as defined in MCL 24.207a, in that the rules increase transparency in costs and streamline the interconnection process. Specifically, the fast track process included in the rules should result in a faster and less expensive interconnection process. However, the rules govern the activities of the utilities and cooperatives that are regulated by the MPSC.

A. Identify and estimate the number of small businesses affected by the proposed rules and the probable effect on small businesses.

All of the electric utilities subject to this ruleset do not meet the definition of “small business.” The small businesses most likely to be indirectly affected by the Interconnection and Distributed Generation Standards rules are distributed energy resource developers like solar installers. It is exceedingly difficult to estimate the number of small businesses indirectly affected because of the increase in distributed energy resources in Michigan and nationwide and the likely continuation of this trend. However, the Commission notes the Generator Interconnection Report provided by Consumers Energy Company on its interconnection website, which lists 1,820 interconnection projects in various stages of the interconnection process (including completed interconnection), that demonstrates the volume of interconnections experienced in recent years by electric utilities. It is unknown how many of these interconnection applicants are small businesses.

B. Describe how the agency established differing compliance or reporting requirements or timetables for small businesses under the rules after projecting the required reporting, record-keeping, and other administrative costs.

The Interconnection and Distributed Generation Standards rules do not impose requirements on small businesses as defined in MCL 24.207a and therefore the Commission did not establish different compliance or reporting standards.

C. Describe how the agency consolidated or simplified the compliance and reporting requirements for small businesses and identify the skills necessary to comply with the reporting requirements.

The Interconnection and Distributed Generation Standards rules do not impose requirements on small businesses as defined in MCL 24.207a, and therefore, the Commission did not consider how to consolidate or simplify compliance and reporting requirements for small businesses.

D. Describe how the agency established performance standards to replace design or operation standards required by the proposed rules.

The Interconnection and Distributed Generation Standards rules do not impose requirements on small businesses as defined in MCL 24.207a, and therefore, the Commission did not establish performance standards to replace design or operation standards required by the rules.

20. Identify any disproportionate impact the proposed rules may have on small businesses because of their size or geographic location.

The Interconnection and Distributed Generation Standards rules do not impose a disproportionate impact on small businesses because of their size or geographic location.

21. Identify the nature of any report and the estimated cost of its preparation by small businesses required to comply with the proposed rules.

The Interconnection and Distributed Generation Standards include a reporting requirement for electric utilities to file an annual interconnection report on a date and in a format determined by the Commission. See, R 460.992. This reporting requirement is not imposed on small businesses as the electric utilities required to comply with the rules do not qualify as small businesses as defined in MCL 24.207a.

22. Analyze the costs of compliance for all small businesses affected by the proposed rules, including costs of equipment, supplies, labor, and increased administrative costs.

The Interconnection and Distributed Generation Standards rules do not impose costs on small businesses. The rules impose some requirements on Commission-regulated electric utilities that do not meet the definition of small business pursuant to MCL 24.207a.

23. Identify the nature and estimated cost of any legal, consulting, or accounting services that small businesses would incur in complying with the proposed rules.

The Interconnection and Distributed Generation Standards rules do not impose costs on small businesses. The rules impose some requirements on Commission-regulated electric utilities that do not meet the definition of small business pursuant to MCL 24.207a.

24. Estimate the ability of small businesses to absorb the costs without suffering economic harm and without adversely affecting competition in the marketplace.

The Interconnection and Distributed Generation Standards rules do not impose costs on small businesses. The rules impose some requirements on Commission-regulated electric utilities that do not meet the definition of small business pursuant to MCL 24.207a.

25. Estimate the cost, if any, to the agency of administering or enforcing a rule that exempts or sets lesser standards for compliance by small businesses.

The Interconnection and Distributed Generation Standards rules do not impose costs on small businesses. The rules impose some requirements on Commission-regulated electric utilities that do not meet the definition of small business pursuant to MCL 24.207a.

26. Identify the impact on the public interest of exempting or setting lesser standards of compliance for small businesses.

The Interconnection and Distributed Generation Standards rules do not apply to any small businesses as defined in MCL 24.207a.

27. Describe whether and how the agency has involved small businesses in the development of the proposed rules.

The Interconnection and Distributed Generation Standards rules do not apply to any small businesses as defined in MCL 24.207a. It is likely that small businesses including solar or wind energy developers or installers were included in the lengthy stakeholder process which occurred as part of rule development. The rules provide a stable process for interconnection to the utility grid system and the rules set limits on the fees that the utility can charge during the interconnection process.

A. If small businesses were involved in the development of the rules, please identify the business(es).

The Interconnection and Distributed Generation Standards rules do not apply to any small businesses as defined in MCL 24.207a.

MPSC Staff hosted 10 stakeholder meetings regarding the interconnection rules between December 2018 and March 2020, and 5 additional stakeholder meetings regarding distributed generation during that time. The Staff also solicited comments from all stakeholders on two versions of the draft rules during this time period. It is likely that small businesses including solar or wind energy developers or installers were included in the lengthy stakeholder process which occurred as part of rule development. However, the MPSC does not regulate these businesses and does not have actual knowledge regarding their size. From reviewing stakeholder sign-in sheets, the MPSC believes that the following participants may be small businesses as defined in MCL 24.207a: Country Air and Solar Energy LLC and Solar Winds Power Systems LLC.

Cost-Benefit Analysis of Rules (independent of statutory impact)

28. Estimate the actual statewide compliance costs of the rule amendments on businesses or groups.

The rules impose some costs on utilities but they are designed such that the bulk of the costs are recovered from the interconnection applicant through the process itself. There may be some marginal administrative costs to the utilities when they initially set up the interconnection queue and website that they will be required to maintain.

With respect to DG, the Legislature has addressed the issue of cost. MCL 460.1175(1)-(2) provides as follows:

(1) An electric utility or alternative electric supplier may charge a fee not to exceed \$50.00 to process an application to participate in the distributed generation program. The customer shall pay all interconnection costs. The commission shall recognize the reasonable cost for each electric utility and alternative electric supplier to operate a distributed generation program. For an electric utility with 1,000,000 or more retail customers in this state, the commission shall include in that electric utility's nonfuel base rates all costs of meeting all program requirements except that all energy costs of the program shall be recovered through the utility's power supply cost recovery mechanism under section 6j of 1939 PA 3, MCL 460.6j. For an electric utility with fewer than 1,000,000 base distribution customers in this state, the commission shall allow that electric utility to recover all energy costs of the program through the power supply cost recovery mechanism under section 6j of 1939 PA 3, MCL 460.6j, and shall develop a cost recovery mechanism for that utility to contemporaneously recover all other costs of meeting the program requirements.

(2) The interconnection requirements of the distributed generation program shall provide that an electric utility or alternative electric supplier shall, subject to any time requirements imposed by the commission and upon reasonable written notice to the distributed generation customer, perform testing and inspection of an interconnected eligible electric generator as is necessary to determine that the system complies with all applicable electric safety, power quality, and interconnection, including metering, requirements. The costs of testing and inspection are considered a cost of operating a distributed generation program and shall be recovered under subsection (1).

A. Identify the businesses or groups who will be directly affected by, bear the cost of, or directly benefit from the proposed rules.

The rules provide detailed instructions and standards for projects owned by customers or developers interconnecting to an electric utility's distribution system. These rules provide a number of improvements and updates to the 2009 interconnection rules. First, the rules set out a standardized process and schedule, including a fast track process for eligible projects, so that interconnections can be accommodated in an orderly and timely manner and in a manner that prevents unnecessary delay and undue discrimination. Second, the rules include a study process and a batch study process that effectively manages the study process, that can be complex when dealing with a number of interconnections at once. Third, the rules define communication, legal, and other obligations of both the utility and the interconnection applicant. Fourth, the rules provide avenues for conflict resolution to address issues efficiently and effectively and reduce the number of complaints filed with the Commission. Lastly, the rules also ensure that interconnections are done safely, in order to protect workers, utility and third-party owned equipment, and the public. The costs associated with these goals are shared by the utility that is being interconnected with and the interconnection applicant through the fees and costs imposed by the rules.

An interconnection process with unpredictable timing, potential unexpected costs, and ambiguity can inhibit the ability of a distributed generation customer or developer to interconnect to the electric utility's distribution system by making the project uneconomical. Additionally, these issues can lead to costly and protracted litigation between the electric utility and the interconnection applicant. These problems have the potential to discourage distributed generation and the interconnection of non-utility generation project which would deprive Michigan utility customers of the benefits DER can bring to the utility distribution system. Further, discouraging distributed generation and interconnection is contrary to the Michigan Legislature's intent to facilitate and encourage interconnection and distributed generation as evidenced by 2008 PA 295, 2016 PA 341, and 2016 PA 342. Thus, beneficiaries of the proposed rules include ratepayers of electric utilities, who may benefit from increased access to distributed energy resources including renewable energy resources, as well as those who develop, install, and maintain distributed energy resources and renewable energy resources. Utilities will also benefit by having a stable, streamlined interconnection process that applies to all interconnection applicants, and that defines the fees that the applicant will be required to pay throughout the process. With respect to quantification, the fees themselves are included in the proposed rules. Finally, MCL 460.1173(6)(a) provides that "The interconnection requirements shall be designed to protect electric utility workers and equipment and the general public."

B. What additional costs will be imposed on businesses and other groups as a result of these proposed rules (i.e. new equipment, supplies, labor, accounting, or recordkeeping)? Please identify the types and number of businesses and groups. Be sure to quantify how each entity will be affected.

The rules provide detailed instructions and standards for projects owned by customers or developers interconnecting to an electric utility's distribution system. These rules provide a number of improvements and updates to the 2009 interconnection rules. First, the rules set out a standardized process and schedule, including a fast track process for eligible projects, so that interconnections can be accommodated in an orderly and timely manner and in a manner that prevents unnecessary delay and undue discrimination. Second, the rules include a study process and a batch study process that effectively manages the study process, that can be complex when dealing with a number of interconnections at once. Third, the rules define communication, legal, and other obligations of both the utility and the interconnection applicant. Fourth, the rules provide avenues for conflict resolution to address issues efficiently and effectively and reduce the number of complaints filed with the Commission. Lastly, the rules also ensure that interconnections are done safely, in order to protect workers, utility and third-party owned equipment, and the public. The costs associated with these goals are shared by the utility that is being interconnected with and the interconnection applicant through the fees and costs imposed by the rules.

An interconnection process with unpredictable timing, potential unexpected costs, and ambiguity can inhibit the ability of a distributed generation customer or developer to interconnect to the electric utility's distribution system by making the project uneconomical. Additionally, these issues can lead to costly and protracted litigation between the electric utility and the interconnection applicant. These problems have the potential to discourage distributed generation and the interconnection of non-utility generation project which would deprive Michigan utility customers of the benefits DER can bring to the utility distribution system. Further, discouraging distributed generation and interconnection is contrary to the Michigan Legislature's intent to facilitate and encourage interconnection and distributed generation as evidenced by 2008 PA 295, 2016 PA 341, and 2016 PA 342. Thus, beneficiaries of the proposed rules include ratepayers of electric utilities, who may benefit from increased access to distributed energy resources including renewable energy resources, as well as those who develop, install, and maintain distributed energy resources and renewable energy resources. Utilities will also benefit by having a stable, streamlined interconnection process that applies to all interconnection applicants, and that defines the fees that the applicant will be required to pay throughout the process. With respect to quantification, the fees themselves are included in the proposed rules.

29. Estimate the actual statewide compliance costs of the proposed rules on individuals (regulated individuals or the public). Include the costs of education, training, application fees, examination fees, license fees, new equipment, supplies, labor, accounting, or recordkeeping.

The rules will affect individual members of the public who want to install DERs, such as solar panels on their homes. These individuals would be subject to the interconnection application fees. If their proposed DER is large enough, they will also be subject to study fees or potential interconnection upgrade fees.

A. How many and what category of individuals will be affected by the rules?

It is not possible for the MPSC to predict the number of individuals who may wish to install DERs on their home.

B. What qualitative and quantitative impact do the proposed changes in rules have on these individuals?

It is not possible for the MPSC to predict the qualitative or quantitative impact of the proposed rules on individuals who may decide in the future to install DERs on their home, other than to note that they will be subject to the fees that are prescribed in the proposed rules. Individuals who install DERs on their home may receive a qualitative benefit to their lives by choosing to use renewable energy sources, and they may eventually receive a quantitative cost/benefit advantage by supplying their own source of energy generation to their home, but these things are not possible to predict.

30. Quantify any cost reductions to businesses, individuals, groups of individuals, or governmental units as a result of the proposed rules.

It is not clear that there will be any cost reductions in the short run, but there will be greater cost certainty by creating a stable, streamlined, and clear regulatory process and by ensuring that the associated fees are capped at certain amounts. For anybody interconnecting a project under the distributed generation (DG) program the initial application fee is half the cost included in the existing net metering rules that are being rescinded (2020-95). Providing a definitive and streamlined process will benefit utilities, those wishing to interconnect, and utility ratepayers.

31. Estimate the primary and direct benefits and any secondary or indirect benefits of the proposed rules. Please provide both quantitative and qualitative information, as well as your assumptions.

The rules provide detailed instructions and standards for projects owned by customers or developers interconnecting to an electric utility's distribution system. These rules provide a number of improvements and updates to the 2009 interconnection rules. First, the rules set out a standardized process and schedule, including a fast track process for eligible projects, so that interconnections can be accommodated in an orderly and timely manner and in a manner that prevents unnecessary delay and undue discrimination. Second, the rules include a study process and a batch study process that effectively manages the study process, that can be complex when dealing with a number of interconnections at once. Third, the rules define communication, legal, and other obligations of both the utility and the interconnection applicant. Fourth, the rules provide avenues for conflict resolution to address issues efficiently and effectively and reduce the number of complaints filed with the Commission. Lastly, the rules also ensure that interconnections are done safely, in order to protect workers, utility and third-party owned equipment, and the public. The costs associated with these goals are shared by the utility that is being interconnected with and the interconnection applicant through the fees and costs imposed by the rules.

An interconnection process with unpredictable timing, potential unexpected costs, and ambiguity can inhibit the ability of a distributed generation customer or developer to interconnect to the electric utility's distribution system by making the project uneconomical. Additionally, these issues can lead to costly and protracted litigation between the electric utility and the interconnection applicant. These problems have the potential to discourage distributed generation and the interconnection of non-utility generation project which would deprive Michigan utility customers of the benefits DER can bring to the utility distribution system. Further, discouraging distributed generation and interconnection is contrary to the Michigan Legislature's intent to facilitate and encourage interconnection and distributed generation as evidenced by 2008 PA 295, 2016 PA 341, and 2016 PA 342. Thus, beneficiaries of the proposed rules include ratepayers of electric utilities, who may benefit from increased access to distributed energy resources including renewable energy resources, as well as those who develop, install, and maintain distributed energy resources and renewable energy resources. Utilities will also benefit by having a stable, streamlined interconnection process that applies to all interconnection applicants, and that defines the fees that the applicant will be required to pay throughout the process. With respect to quantification, the fees themselves are included in the proposed rules.

32. Explain how the proposed rules will impact business growth and job creation (or elimination) in Michigan.

As noted previously, there is no direct impact on business growth and job creation, but the rules aim to improve and streamline the interconnection process which, in turn, could lead to an increase in the number of interconnection projects in the state. The Commission is aware of some interconnection applicants with projects planned for development in different areas of the state. In those instances, the potential public and private interests could include permitting, local zoning, land acquisition, and potential contracting opportunities in the development of these projects; and the potential business interests could include wind or solar developers or installers, small and large.

33. Identify any individuals or businesses who will be disproportionately affected by the rules as a result of their industrial sector, segment of the public, business size, or geographic location.

The MPSC regulates investor owned utilities and electric cooperatives. Only these two types of electric utilities are subject to the rules.

34. Identify the sources the agency relied upon in compiling the regulatory impact statement, including the methodology utilized in determining the existence and extent of the impact of the proposed rules and a cost-benefit analysis of the proposed rules.

The staff members of the MPSC's Energy Resources Division and Regulatory Affairs Division.

A. How were estimates made, and what were your assumptions? Include internal and external sources, published reports, information provided by associations or organizations, etc., that demonstrate a need for the proposed rules.

Assumptions are based on the expertise of the Commission Staff and information gleaned from the lengthy stakeholder process.

Alternative to Regulation

35. Identify any reasonable alternatives to the proposed rules that would achieve the same or similar goals.

The MPSC is not aware of any reasonable alternative. The electric utility sector is subject to economic regulation throughout the United States due to the opportunity for monopoly market power. While utilities no longer own 100% of generation, they continue to own 100% of the distribution system. The rules create a streamlined, defined, and fair process for interconnection to the utility's grid system, which could not be created using only market forces due to the electric utility's monopoly power.

A. Please include any statutory amendments that may be necessary to achieve such alternatives.

None are required.

36. Discuss the feasibility of establishing a regulatory program similar to that proposed in the rules that would operate through private market-based mechanisms. Please include a discussion of private market-based systems utilized by other states.

The MPSC finds that this is not feasible. The electric utility sector is subject to economic regulation throughout the United States due to the opportunity for monopoly market power. While utilities no longer own 100% of generation, they continue to own 100% of the distribution system. The rules create a streamlined, defined, and fair process for interconnection to the utility's grid system, which could not be created using only market forces due to the electric utility's monopoly power.

37. Discuss all significant alternatives the agency considered during rule development and why they were not incorporated into the rules. This section should include ideas considered both during internal discussions and discussions with stakeholders, affected parties, or advisory groups.

No other significant alternatives were discussed.

Additional Information

38. As required by MCL 24.245b(1)(c), please describe any instructions regarding the method of complying with the rules, if applicable.

There are no necessary instructions regarding the method of complying with the rules.