

STATE OF MICHIGAN
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

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In the matter, on the Commission's own motion,	)	
of the interconnection of merchant plants with	)	
the transmission and distribution systems of	)	Case No. U-12485
electric utilities.	)	
_____	)	

In the matter, on the Commission's own motion,	)	
to promulgate rules governing the interconnection	)	Case No. U-13745
of independent power projects with electric utilities.	)	
_____	)	

At the March 26, 2003 meeting of the Michigan Public Service Commission in Lansing,
Michigan.

PRESENT: Hon. Laura Chappelle, Chairman
Hon. David A. Svanda, Commissioner
Hon. Robert B. Nelson, Commissioner

ORDER AND NOTICE OF HEARING

History of Proceedings

On June 19, 2000, the Commission issued an order commencing this proceeding for the purpose of implementing Section 10e(3) of the Customer Choice and Electricity Reliability Act, MCL 460.10e(3), which requires it "to establish standards for the interconnection of merchant plants with the transmission and distribution systems of electric utilities." As required by the order, the Commission Staff (Staff) consulted with interested persons and filed a final report on October 2, 2000. The Commission issued an order on February 5, 2001, which reviewed the Staff's findings and made the following principal determinations:

1. The Commission's authority to establish interconnection standards is subject to federal law, which authorizes the Federal Energy Regulatory Commission (FERC) to regulate interconnection when it relates to transmission service. Accordingly, the Commission's standards apply only to interconnection at the distributional voltage level, as defined for each utility by applying the FERC's seven factor test.¹ Applicable provisions of FERC-approved Open Access Transmission Tariffs would govern interconnection at transmission voltages.
2. If a plant's voltage is high enough to be comparable to typical transmission-level voltages, e.g., more than 41.6 kilovolts (kV) for The Detroit Edison Company (Detroit Edison) or more than 46 kV for Consumers Energy Company (Consumers), the interconnection should comply with FERC standards, even though the facilities may be classified as distributional under the seven factor test. For example, Detroit Edison has some 120 kV radial lines that are classified as distribution facilities, but interconnection with those facilities would comply with FERC standards.
3. Because the technical complexity of interconnection generally increases with the size of the plant, it is necessary to develop different standards that correspond to project capacity. The order requires separate sets of standards that impose escalating technical requirements for five capacity-based categories:
 - (i) Under 100 kilowatts (kW).
 - (ii) 100 kW or more, but under 500 kW.
 - (iii) 500 kW or more, but under 1 megawatt (MW).
 - (iv) 1 MW or more, but under 40 MW.
 - (v) 40 MW or more.
4. The standards must specify strict time limits for processing applications and completing the tasks required to accommodate the interconnection.
5. Costs charged by utilities to project developers for processing applications must be reasonable. The standards should incorporate mechanisms that limit charges in light of the size, type, complexity, and location of the project.

¹ Promoting Wholesale Competition Through Open Access Non-discriminatory Transmission Services by Public Utilities; Recovery of Stranded Costs by Public Utilities and Transmitting Utilities, Order No. 888, FERC Stats & Regs ¶ 31,036 (1996), on reh Order No. 888-A, FERC Stats and Regs ¶ 31,048, at pp. 30,181-82, 30,335-46 (1997), aff'd in relevant part sub nom Transmission Access Policy Study Group v FERC, 343 US App DC 151; 225 F3d 667 (2000), aff'd sub nom New York v FERC, 535 US 1; 122 S Ct 1012; 152 L Ed 2d 47 (2002).

The Commission directed each electric utility to file proposed interconnection standards that were consistent with the preceding determinations and further provided an opportunity for interested persons to file comments.

Detroit Edison, Consumers, the Michigan Electric and Gas Association (MEGA), and the Michigan Electric Cooperative Association (MECA) filed proposals. MEGA filed its proposal on behalf of Alpena Power Company, Indiana Michigan Power Company, d/b/a American Electric Power, Edison Sault Electric Company, Upper Peninsula Power Company, Wisconsin Electric Power Company, Wisconsin Public Service Corporation, and Northern States Power Company-Wisconsin, d/b/a Xcel Energy. MECA's proposal was on behalf of its member cooperatives: Alger Delta Cooperative Electric Association, Cherryland Electric Cooperative, Cloverland Electric Cooperative, Great Lakes Energy Cooperative, HomeWorks Tri-County Cooperative, Midwest Energy Cooperative, The Ontonagon County Rural Electrification Association, Presque Isle Electric & Gas Co-op, Thumb Electric Cooperative of Michigan, and Wolverine Power Supply Cooperative, Inc.

The parties filing reply comments were Exelon Energy Company and Exelon Services, Inc. (collectively, Exelon) (addressing only Detroit Edison's proposal), Detroit Edison, MEGA, the Staff, and Energy Michigan (addressing only the proposals of Consumers and Detroit Edison).

Overview of Proposed Standards

a. Detroit Edison

Detroit Edison's proposed interconnection standards apply to units connected at voltages of 41.6 kV or less and address a number of matters of an engineering or technical nature. They provide requirements for metering, telemetry, parallel operation, power quality, protective relaying, and testing of facilities, among other things. However, a large part of the technical

standards do not apply to single-phase generating units that are 25 kilovolt-amperes (kVA) or less,² which Detroit Edison expects will be used primarily for residential purposes.

The standards provide two separate application procedures that apply depending on the size of the project relative to the 25 kVA capacity cutoff. An application form accompanies each procedure. For 25 kVA or less, the application process is streamlined, and Detroit Edison indicates that, in normal circumstances, it should take no more than four weeks to complete. For the most part, neither procedure provides definitive deadlines for completing the various tasks required by the interconnection process, although some stages of the process specify a typical period for a task to be completed. For example, the standards indicate that Detroit Edison will generally respond to initial inquiries concerning interconnection within two to three business days and notify the applicant within five business days regarding whether the application is complete.

For applications larger than 25 kVA, the process requires engineering studies. Once it receives a complete application, Detroit Edison will determine the types of studies that are necessary, and this determination typically requires 5 to 20 days. Detroit Edison estimates another 10 to 40 days to conduct an interconnection review, in which it performs the engineering studies and prepares a written assessment of technical feasibility, a work schedule for system modifications, and an estimate of the cost required to upgrade the utility's facilities. Thereafter, if the applicant decides to proceed with the project, it will sign an interconnection agreement with Detroit Edison, submit a detailed design package for review and acceptance, pay the estimated costs, and complete testing of the facilities as constructed.

² Detroit Edison quantifies capacity ratings in volt-amperes instead of watts. As a technical matter, the difference in terminology relates to reactive power considerations, but, as measures of capacity, a volt-ampere and watt are roughly comparable.

Detroit Edison's proposed fees include a non-refundable application fee and various charges that reimburse costs as Detroit Edison incurs them during successive stages of the interconnection process. The study impact charge covers the engineering studies. The system modification charge recovers the costs of purchasing, installing, and modifying utility distribution facilities. The field services charge covers services related to testing, setting of relays, meter installation, and site approval. The fee amounts are as follows:

Application fee:		
Single-phase generation, 25 kVA or less		\$200
Other generation, 100 kVA or less		\$300
Other generation, more than 100 kVA		\$1,000
System impact study charge:		
100 kVA or less		None
All others		Cost ³
System modification charge		Cost
Field services charge:		
Single phase, 25 kVA or less		\$500
Other generation, 100 kVA or less		\$700
More than 100 kVA		Quoted cost

b. Consumers

The technical requirements of Consumers' proposed standards are comparable in scope and detail to Detroit Edison's. Consumers' standards impose escalating requirements for three categories defined by the project's aggregate generator output, each with its own application form and standards: (1) under 100 kW, (2) 100 to 999 kW, and (3) 1 MW or more. The stages of Consumers' interconnection process are also similar to Detroit Edison's, in that the process starts with a complete application. Consumers then determines whether and what type of engineering

³ The system impact study charge also applies to single-phase generators connected to customers with multiple primary distribution feeder sources, regardless of capacity.

study is required, prepares a study agreement for the applicant to sign, collects a study fee, performs the study, and prepares and submits an interconnection agreement.

Consumers' three sets of standards each provide time requirements for the milestones in the process. The least complex type of project under Consumers' standards is a non-sell-back generator with a capacity of less than 100 kW. The standards define a non-sell-back generator as not selling its electrical output to another party or transmitting any output across Consumers' system. In that instance, Consumers proposes to complete the tasks required to sign an interconnection agreement within 15 to 20 days of receiving the application: 5 days or less to review and accept (or reject) the application, plus 15 days or less to conduct an abbreviated interconnection study and prepare an interconnection and operating agreement. More complex projects would require more time: up to 60 days for a project under 100 kW, up to 110 days for 100 to 999 kW, and up to 155 days for 1 MW or more. Unlike Detroit Edison, Consumers' timeframes do not cover construction-related and testing activities after the interconnection agreement is signed, although the technical standards impose criteria for testing and standards applicable to the facilities as built.

Consumers' fees are as follows:

Application fee:	
Under 100 kW	\$400
100 kW to 999 kW	\$1,000
1 MW or more	\$1,000

Interconnection study fee:⁴

Under 100 kW, non-sell-back	None
Under 100 kW, sell-back	Cost (up-front fee, \$2,000)
100 kW to 999 kW (if required)	Cost (up-front fee, \$4,000)
1 MW or more	Cost (up-front fee, \$6,000)

c. MEGA

MEGA's proposal contains two size classifications: (1) single-phase generation that is not more than 25 kW and 3-phase generation not more than 500 kW, and (2) 3-phase generation from 500 kW to 10 MW. MEGA further proposes that any generation of 10 MW or more should conform to FERC interconnection standards, even if the interconnection is classified as distributional for jurisdictional purposes. As is the case with the other proposals, MEGA's proposal calls for technical standards that increase in detail with the size and complexity of the project. Thus, if the project is relatively simple, e.g., a small distributed generation project, the utility would handle it under an abbreviated process and would offer the applicant a simplified interconnection agreement.

MEGA's proposal provides timeframes of five business days for notifying the applicant that the utility has received the application and ten business days to provide notification whether or not the application is complete. If it is, the utility would indicate whether a system impact (engineering) study is necessary and charge the applicant a study fee based on the estimated cost of the study, payable in advance. Thereafter, the process envisions that the utility and the applicant sign an interconnection agreement and that the utility perform any required construction or upgrade of its facilities. When there is no need for construction on the utility's part, the

⁴ Although Consumers proposes to charge the actual cost of conducting the engineering study (except for non-sell-back projects under 100 kW), the up-front fee represents the estimated cost that the applicant must pay before the study commences. The fee is subject to reconciliation for actual costs.

proposal provides for actual interconnection within four weeks of the signing of the interconnection agreement.

If the interconnection requires utility construction, the utility would provide the applicant with a work schedule and estimate the applicant's cost for the upgrades. The utility and applicant must then sign a contract for the upgrade work. The utility will stand ready to provide interconnection no later than two weeks after it finishes the upgrades.

MEGA's proposed fees are as follows:

Application fee (non-refundable)	
Single-phase	\$100
3-phase	\$500
System impact study fee	Cost
Utility system upgrades	Cost

d. MECA

MECA proposes that the Commission adopt standards that are currently under development by the Institute of Electrical and Electronics Engineers, Inc. (IEEE). Attached to its proposal is a document entitled "IEEE P1547/D07 Draft Standard for Interconnecting Distributed Resources with Electric Power Systems." The stated purpose of proposed IEEE Standard 1547 is to provide "a uniform standard for interconnection of distributed resources with electric power systems" and "requirements relevant to the performance, testing, safety considerations, and maintenance of the interconnection." IEEE P1547/D07, at p. 8.

The scope of the draft is technical. MECA's submission does not address an application process, timeframes, or fees.

Discussion

a. Project size classifications

The February 5, 2001 order delineated five size classifications that would dictate the level of technical oversight to be provided in the standards. None of the proposals submitted to the Commission in response to the order adopt the five classifications or explain why fewer or different classifications are more appropriate.

In its comments, Exelon faults Detroit Edison for providing only two size classifications. Exelon says that projects of a wide variety of sizes exceeding 25 kVA are not comparable and cannot be treated the same for engineering purposes, but that differences within those parameters will require variances in the amount of study, equipment, review, time, and cost. Energy Michigan agrees that Detroit Edison's single classification for all projects above 25 kVA is overly broad and would impose disproportionate administrative burdens on projects as large as 10,000 kVA.

Detroit Edison responds that factors other than generator size influence the criteria for interconnection. Detroit Edison cites circuit design, operating characteristics, and electrical system configuration.

The Commission finds that the proposals submitted by the utilities do not conform to the size classifications set forth in the February 5, 2001 order and do not achieve the Commission's objective of creating standards, requirements, processes, and fees that are appropriate relative to the size of a project. These standards are not acceptable as proposed. Moreover, the standards should make clear that interconnection with distribution facilities at or above voltage levels ordinarily associated with transmission facilities (41.6 kV for Detroit Edison, 46 kV for Consumers) must adhere to FERC standards, as set forth in the February 5, 2001 order at 4-6.

b. Application process and deadlines

Exelon and Energy Michigan criticize the time deadlines for completing milestones in the application and interconnection process as non-binding, lengthy, and open-ended. They say that the standards would allow considerable delay, especially for larger projects. Exelon complains that Detroit Edison's standards require a minimum of 8½ to 10 weeks to complete and that its shortcomings may be due in part to its failure to create more than two size classifications. Exelon supports Consumers' proposed milestones, but Energy Michigan finds even them to be conducive to delay. Energy Michigan suggests that if a utility fails to meet definite deadlines, the applicant should have the right to perform the utility's construction work, and the utility should pay liquidated damages.

The Commission agrees with the commenting parties that the entire interconnection process, from the filing of the application to the physical interconnection with the utility's system, should be subject to definite time deadlines, with specific periods provided for meeting major milestones. The Commission will not permit utilities to set open-ended timeframes that invite delay. Each utility should be accountable for missed deadlines that are not attributable to the applicant. Measured against this standard, the proposals submitted by Detroit Edison and MEGA do not provide definite deadlines, and MECA's does not address time constraints, contrary to the directives in the February 5, 2001 order. Although Consumers' proposal provides definite time periods for completing tasks through the signing of an interconnection agreement, it does not specify similar periods for accomplishing the construction and other activities required to provide a physical interconnection with its facilities.

The Commission proposes that the entire interconnection process, up to and including the energization of new facilities, be subject to time requirements that are specific to the five project

capacity classifications established in the February 5, 2001 order. The time frames for interconnection should range from two to ten weeks, depending upon the classification. If utility construction or upgrades are required to effect an interconnection, the utility and the applicant must enter into a contractual agreement to perform the upgrades. The contract shall provide for the costs to be charged to the project applicant and the schedule governing future milestones culminating in the interconnection. The Commission also finds merit in Energy Michigan's suggestion to allow the applicant to perform construction affecting utility-owned facilities, if the utility fails to meet its deadlines.

c. Fees

Exelon says that Detroit Edison could improve its fee structure by creating more than two size classifications and providing a fee schedule that is appropriate to each. It alternatively suggests that the fee structure could be acceptable if the 100 kVA or less category (for fee purposes) were increased to 1 MW or less. It adds that Detroit Edison's proposed field services charge finds no counterpart with other utilities.

Energy Michigan does not generally take issue with Detroit Edison's fees as they affect projects of 25 kVA or less, but it does say that the charges would be burdensome if applied to very small distributed generation units that serve a single household. Energy Michigan suggests that a reasonable charge could be \$5 per kW, which would cover both the application fee and the system impact study charge.

The Staff comments that the utilities' proposed fees are excessive and would act as a deterrent to competitive generation. The Staff says that fees should be limited to incremental, out-of-pocket costs, given that each utility recovers the cost of its personnel and overheads through base rates. The Staff proposes uniform fees of \$50 to \$100 for residential projects and \$100 to \$200 for non-

residential projects. These fees would cover the cost of filing and reviewing an application. As part of the fee arrangement, a utility would provide up to two hours of consultation and estimate the future costs required to complete the interconnection of the project.

The Commission finds that the Staff's proposal regarding application fees is reasonable. The Commission also agrees that it is reasonable for the utility to provide an initial review of the application and two hours of consultation relating to that review in exchange for the fee. In Detroit Edison's case, the proposed field services charges lack justification. Furthermore, the utilities should be required to develop a uniform schedule for charges covering engineering studies, when those studies are necessary to effect an interconnection. The scheduled charge should vary with the size classification of the project. As upward limits, the engineering charges should not exceed 5% of the total cost of the project or \$10,000 for the largest project that would be governed by the standards.

d. Technical standards

MECA relies on proposed IEEE Standard 1547 to supply technical criteria, and Consumers cross-referenced that standard in parts of its own proposal. Exelon criticizes Detroit Edison's standards as outdated, says that IEEE Standard 1547 represents the direction being taken by the industry, and recommends adoption of Consumers' technical standards. Detroit Edison says that IEEE Standard 1547 should be adopted as it will be the most widely accepted standard in the industry.

Once it becomes final, IEEE Standard 1547 will likely represent an industry-wide consensus regarding definitive technical standards for interconnection. The utilities and other interested persons should consider whether it is appropriate to adopt it or incorporate it by reference, in

whole or in part. The Commission will monitor the IEEE process and consider how to incorporate the final standard, in whole or in part, when it becomes available.

e. Implementation

MEGA and Energy Michigan suggest that the Commission use the utilities' proposals as a starting point for launching an informal collaborative proceeding to resolve remaining issues and details. MEGA and Detroit Edison oppose adopting one uniform set of standards that would apply to all utilities in Michigan, but MEGA does say that the parties to this proceeding should form as much consensus as possible before each utility proceeds to develop its individual standards.

The Commission is not prepared to adopt any of the proposals submitted at this time. None promote interconnection in the way that the Commission envisioned when it commenced these proceedings, and none are fully consistent with Section 10e. Moreover, it is apparent that some standards should be shared in common by all utilities, but that others may vary from utility to utility on the basis of differences in how each utility has designed and operates its distribution system.

The Commission has determined that the next step should be to commence a rulemaking. Rulemaking is an appropriate vehicle for implementing statutorily mandated standards. A rulemaking will focus on those standards that can be applied to all electric utility systems in Michigan, so that the rules prescribe as much uniformity as possible. At the same time, the rules will allow each utility to develop its own standards to make allowances for its own operating characteristics and clarify how the uniform standards should apply in a specific context. Other advantages of a rulemaking are that it will promote clarity in meaning, reduce the uncertainty of statutory and legal ambiguities, and provide a means to resolve issues that cannot resolve themselves through consensus.

To commence the rulemaking process, the Commission has drafted rules that incorporate the determinations made to date in Case No. U-12485. The proposed rules, which are attached as Exhibit A, will serve as the starting point for the rulemaking in Case No. U-13745. The Commission has scheduled a public hearing as required by Section 41 of the Administrative Procedures Act of 1969, MCL 24.241, to receive comments on the proposed rules. Exhibit B, attached to this order, is the notice of the public hearing that has been scheduled for 9:00 a.m. on May 14, 2003 in the offices of the Commission, 6545 Mercantile Way, Lansing, Michigan. Any person may attend the public hearing to comment on the proposed rules, and the Commission encourages interested parties to become involved in this proceeding. In addition, any person may submit written comments regarding the proposed rules. Those comments should reference Case No. U-13745 and must be received no later than May 28, 2003 in order to be considered. The proposed effective date of the rules is March 1, 2004.

The Commission has selected this rulemaking proceeding (Case No. U-13475) for participation in its Electronic Filings Program. The Commission recognizes that some residential customers may not have the computer equipment necessary to submit documents electronically. Therefore, residential customers may submit documents in the traditional paper format and mail them to the: Executive Secretary, Michigan Public Service Commission, 6545 Mercantile Way, P.O. Box 30221, Lansing, Michigan 48909. Otherwise, all documents filed in this case must be submitted in both paper and electronic versions. An original and four paper copies and an electronic copy in the portable document format (PDF) should be filed with the Commission. Requirements for filing electronic documents can be found in the Electronic Filings Users Manual at: <http://efile.mpsc.cis.state.mi.us/efile/usersmanual.pdf>. You may contact the Commission Staff

at 517.241.6170 or by e-mail at mpscefilecases@michigan.gov with any questions and to obtain access privileges prior to filing.

The Commission FINDS that:

a. Jurisdiction is pursuant to 1909 PA 106, as amended, MCL 460.551 et seq.; 1919 PA 419, as amended, MCL 460.51 et seq.; 1939 PA 3, as amended, MCL 460.1 et seq.; 1969 PA 306, as amended, MCL 24.201 et seq.; and the Commission's Rules of Practice and Procedure, as amended, 1992 AACCS, R 460.17101 et seq.

b. A hearing should be held on the proposed rules.

THEREFORE, IT IS ORDERED that:

A. A notice of hearing regarding the adoption of rules governing the interconnection of independent power projects with the distribution systems of electric utilities shall be published in accordance with the requirements of the Administrative Procedures Act of 1969.

B. A public hearing regarding the proposed rules shall be held at 9:00 a.m. on May 14, 2003 in the offices of the Commission, 6545 Mercantile Way, Lansing, Michigan. The proposed rules are attached as Exhibit A to this order, and a notice of hearing is attached as Exhibit B.

C. The public hearing will be legislative in nature and any person may present data, views, questions, and arguments regarding the proposed rules. Statements may be limited in duration by the presiding officer in order to ensure that all interested parties have an opportunity to participate in the proceedings. If necessary, the proceeding will continue on such dates as the presiding officer may schedule until all persons have had a reasonable opportunity to be heard.

D. Any person may file written comments, suggestions, data, views, questions, arguments, and modifications concerning the proposed rules at the public hearing or with the Office of the

Executive Secretary, Michigan Public Service Commission, 6545 Mercantile Way, P.O. Box 30221, Lansing, Michigan 48909. All written comments must be filed no later than 5:00 p.m. on May 28, 2003. All comments should reference Case No. U-13745.

E. The docket in Case No. U-12485 is closed.

The Commission reserves jurisdiction and may issue further orders as necessary.

Any party desiring to appeal this order must do so in the appropriate court within 30 days after issuance and notice of this order, pursuant to MCL 462.26.

MICHIGAN PUBLIC SERVICE COMMISSION

/s/ Laura Chappelle
Chairman

(S E A L)

/s/ David A. Svanda
Commissioner

/s/ Robert B. Nelson
Commissioner

By its action of March 26, 2003.

/s/ Dorothy Wideman
Its Executive Secretary

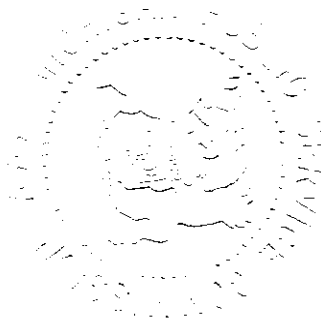
Executive Secretary, Michigan Public Service Commission, 6545 Mercantile Way, P.O. Box 30221, Lansing, Michigan 48909. All written comments must be filed no later than 5:00 p.m. on May 28, 2003. All comments should reference Case No. U-13745.

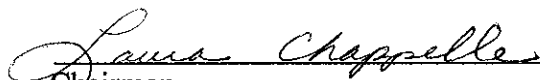
E. The docket in Case No. U-12485 is closed.

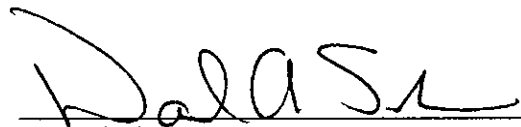
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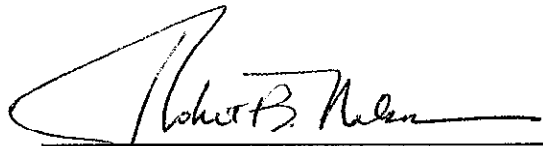
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MICHIGAN PUBLIC SERVICE COMMISSION

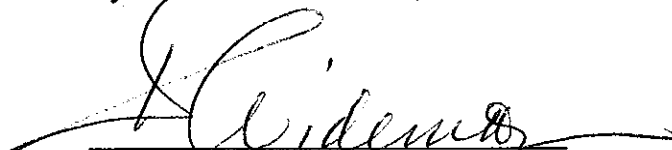



Chairman


Commissioner


Commissioner

By its action of March 26, 2003.


Its Executive Secretary

DEPARTMENT OF CONSUMER AND INDUSTRY SERVICES

PUBLIC SERVICE COMMISSION

ELECTRIC INTERCONNECTION STANDARDS

Filed with the Secretary of State on
These rules take effect 7 days after filing with the Secretary of State

(By authority conferred on the public service commission by section 7 of 1909 PA 106, MCL 460.557, section 5 of 1919 PA 419, MCL 460.55, and sections 4, 6, and 10e of 1939 PA 3, MCL 460.4, 460.6, and 460.10e)

R 460.481 Definitions.

Rule 1. (1) As used in these rules:

(a) "Distribution system" means the structures, equipment, and facilities operated by an electric utility to transfer electricity to end users, but it excludes transmission facilities that are subject to the jurisdiction of the federal energy regulatory commission.

(b) "Interconnection" means the process administered by an electric utility to implement the electrical connection of a project with a distribution system.

(c) "Interconnection procedures" mean the requirements adopted by each electric utility and approved by the commission to govern interconnection.

(d) "Project" means a merchant plant and other electric generating equipment and associated facilities that are not owned or operated by an electric utility.

(e) "Project developer" means a person that owns, operates, or proposes to construct, own, or operate, a project.

(2) A term defined in section 10g of 1939 PA 3, MCL 460.10g, has the same meaning when used in these rules.

R 460.482 Electric utility interconnection procedures.

Rule 2. (1) Each electric utility shall file an application for approval of proposed interconnection procedures within 90 days of the effective date of these rules. Two or more electric utilities may file a joint application proposing a single set of interconnection procedures.

(2) The commission may approve, modify, or reject the proposed interconnection procedures. The commission shall issue its approval if the procedures, as proposed by the electric utility or with modifications required by the commission, meet all of the following requirements:

(a) Describe the steps necessary to effect the connection of a merchant plant or other project with the distribution system of the electric utility.

(b) Designate a single point of contact at the electric utility for all communications about interconnection.

(c) Are consistent with generally accepted industry practices and guidelines.

(d) Ensure the reliability of electric service and the safety of customers, utility employees, and the general public.

(e) Ensure compliance with these rules.

R 460.483 Technical criteria.

Rule 3. (1) The interconnection procedures shall specify technical, engineering, and operational requirements that are suitable for the electric utility's distribution system. The procedures shall include provisions that apply specifically to a project that designates some or all of its electrical output for sale to an electric utility or a third party.

(2) The interconnection procedures shall make provisions that are appropriate for the size and capacity of a project as they affect the technical and engineering complexity of the interconnection. The procedures shall include a distinct set of requirements for each of the following project capacity classifications:

(a) Less than 100 kilowatts.

(b) One hundred kilowatts or more, but less than 500 kilowatts.

(c) Five hundred kilowatts or more, but less than 1 megawatt.

(d) One megawatt or more, but less than 40 megawatts.

(e) Forty megawatts or more.

(3) If the voltage at the electrical connection is comparable to the electric utility's transmission voltages, but the electric utility's facilities are classified as part of its distribution system for jurisdictional purposes, such as a radial line, the project shall not be subject to the interconnection procedures approved under these rules. The interconnection shall instead comply with analogous federal energy regulatory commission standards.

R 460.484 Project application.

Rule 4. (1) The interconnection procedures shall prescribe a process for a project developer to apply to an electric utility for an interconnection.

(2) If an electric utility rejects an application for interconnection or otherwise withholds interconnection, then it shall provide the project developer with a written explanation of the reasons, which shall be based on demonstrably valid technical, reliability, or safety criteria.

R 460.485 Project filing fee.

Rule 5. (1) A project developer shall pay the electric utility a filing fee of \$100 if the project's capacity is less than 100 kilowatts and the electrical output will be used exclusively for residential purposes. The fee shall be \$200 for all other projects.

(2) In exchange for the fee, the electric utility shall conduct an initial review of the application and provide the project developer 2 hours of consultation relating to the review. The consultation shall include a good faith estimate of the electric utility's charges to complete the interconnection.

(3) An electric utility may not charge additional fees, unless they are authorized by these rules.

R 460.486 Interconnection deadlines.

Rule 6. (1) The interconnection procedures shall set deadlines for processing an application filed by a project developer, achieving major milestones, and completing the interconnection and shall preclude undue delay. The deadlines shall ensure that the period from the date that the project developer files a complete application to the completion of all of the electric utility's obligations for interconnection shall be no longer than the following for each project capacity classification:

- (a) Less than 100 kilowatts2 weeks
- (b) One hundred kilowatts or more, but less than 500 kilowatts ..4 weeks
- (c) Five hundred kilowatts or more, but less than 1 megawatt6 weeks
- (d) One megawatt or more, but less than 40 megawatts8 weeks
- (e) Forty megawatts or more10 weeks

(2) Delays that are the responsibility of the project developer shall not be included in determining compliance with the deadlines imposed in subrule (1) of this rule.

(3) An electric utility shall acknowledge receipt of an application within 3 days, excluding Saturdays, Sundays, and other days when the offices of the electric utility are not open to the public.

(4) The interconnection procedures shall set a reasonable deadline for the electric utility to make an initial response to the application. The initial response shall indicate whether the application complies with the interconnection procedures and the standards set forth in these rules and identify any information required to complete the application or bring it into compliance.

R 460.487 Additional services provided by electric utility.

Rule 7. (1) The interconnection procedures shall state the conditions in which engineering studies or physical construction or modification of the electric utility's distribution system are required to facilitate or complete an interconnection. If any of those services are necessary, the

electric utility and the project developer shall make a written agreement that sets forth the charges and other terms and conditions. The electric utility may prescribe standardized agreement forms as part of its interconnection procedures.

(2) The interconnection procedures shall set forth a uniform schedule of charges for engineering studies. The charges shall not exceed the lesser of either of the following:

- (a) Five percent of the estimated total cost of the project.
- (b) Ten thousand dollars.

(3) The interconnection procedures shall not require, or impose charges for, engineering studies if the project's aggregate export capacity is less than 15% of the line section peak load and the project does not contribute more than 25% of the maximum short circuit current at the point of interconnection.

(4) An agreement may impose charges for the electric utility's cost of making physical modifications to its distribution system, which shall not exceed reasonable, actual costs.

(5) An agreement required by this rule shall set deadlines for the electric utility to perform its obligations. The deadlines shall be consistent with the requirements in R 460.486(1). If the electric utility is unable to perform its obligations within the deadlines, then the project developer may choose to perform the necessary services or construction in compliance with the electric utility's specifications.

R 460.488 Pre-certified equipment.

Rule 8. The interconnection procedures shall include provisions for creating and maintaining an up-to-date listing of pre-certified types, makes, and models of manufactured generating equipment. The electric utility shall include an item of equipment in its pre-certified list if the item is generally acceptable for interconnection with the distribution system and a detailed review of the item's engineering design, characteristics, or suitability is not necessary to approve its use or installation by a project developer.

STATE OF MICHIGAN
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

* * * * *

NOTICE OF HEARING
REGARDING THE PROMULGATION OF ADMINISTRATIVE RULES GOVERNING
ELECTRIC INTERCONNECTION STANDARDS

CASE NO. U-13745

- The Michigan Public Service Commission is considering the promulgation of rules governing the interconnection of independent power generating equipment with electric utility distribution systems. The proposed rules are new and would implement Section 10e(3) of the Customer Choice and Electricity Reliability Act, MCL 460.10e(3). The proposed effective date is March 1, 2004.
- The information below describes how a person may participate in this case.
- You may write or call the Michigan Public Service Commission, 6545 Mercantile Way, Lansing, Michigan, or 517.241.6170 for a free copy of the proposed rules. Additionally, any person may review the proposed rules at the Commission's offices.
- The public hearing will be held:

DATE:

May 14, 2003

This public hearing is open to anyone who may desire to comment on the proposed rules.

TIME:

9:00 a.m.

LOCATION:

Michigan Public Service Commission
6545 Mercantile Way, Suite 7
Lansing, Michigan

PARTICIPATION:

Any interested person may attend and participate. Persons with disabilities, needing help to effectively participate, should call the Commission's Executive Secretary at 517.241.6160 a week in advance to request mobility, visual, hearing, or other assistance.

The Commission will hold a public hearing to provide an opportunity for all interested persons to present statements, views, data, questions, or arguments concerning the proposed administrative rules. The proposed rules are intended to address procedural requirements, timetables, filing fees, and requirements concerning engineering studies and construction pursuant to MCL 460.10e(3), which requires the Commission to establish standards for the interconnection of merchant plants with electric utility systems. The public hearing will continue until all parties present have had a reasonable opportunity to present statements regarding the proposed rules. Persons presenting statements may be asked questions by the Commission and its Staff, as well as by the presiding officer. Statements may be limited in duration by the presiding officer in order to ensure that all interested parties have an opportunity to participate in the proceedings.

In addition, interested parties may file written comments concerning the proposed rules with the Commission not later than May 28, 2003 at 5:00 p.m. **The Commission has selected this rulemaking proceeding for participation in its Electronic Filings Program. The Commission recognizes that some residential customers may not have the computer equipment necessary to submit documents electronically. Therefore, residential customers may submit documents in the traditional paper format and mail them to the: Executive Secretary, Michigan Public Service Commission, 6545 Mercantile Way, P.O. Box 30221, Lansing, Michigan 48909. Otherwise, all documents filed in this case must be submitted in both paper and electronic versions. An original and four paper copies and an electronic copy in the portable document format (PDF) should be filed with the Commission.** Written comments may also be filed in a similar manner at the public hearing. The Commission requests that written comments refer to Case No. U-13745.

Requirements for filing electronic documents can be found in the Electronic Filings Users Manual at: <http://efile.mpsc.cis.state.mi.us/efile/usersmanual.pdf> . You may contact the Commission Staff at 517.241.6170 or by e-mail at mpscefilecases@michigan.gov with any questions and to obtain access privileges prior to filing.

The Commission has authority pursuant to 1909 PA 106, as amended, MCL 460.551 et seq.; 1919 PA 419, as amended, MCL 460.51 et seq.; 1939 PA 3, as amended, MCL 460.1 et seq.; 1969 PA 306, as amended, MCL 24.201 et seq.; and the Commission's Rules of Practice and Procedure, as amended, 1992 AACCS, R 460.17101 et seq.

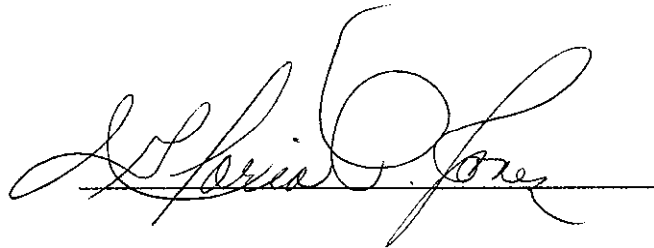
PROOF OF SERVICE

STATE OF MICHIGAN)

Case No. U-12485

County of Ingham)

Gloria P. Jones being duly sworn, deposes and says that on March 28, 2003, A.D. she served a copy of the attached Commission Order by mailing copies thereof by first class mail, postage prepaid, or by inter-departmental mail, to the persons as shown on the attached service list.

A handwritten signature in cursive script, appearing to read "Gloria P. Jones", written over a horizontal line.

Subscribed and sworn to before me
this 28th day of March 2003


Notary Public, Ingham, County, Michigan
My Commission expires August 16, 2004

SERVICE LIST FOR DOCKET # U - 12485-
DATE OF PREPARATION: 03/25/2003

CASE #

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U-12485

CMS Marketing, Services and Trading Co.
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ALL ELECTRIC ORDERS

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DATE: 02/18/2003

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