

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	)	Case No. U-12485
of electric utilities.	)	
_____	)	

At the February 5, 2001 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

Introduction

On June 5, 2000, Public Act 141 of 2000 took effect. Subsection 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.

MCL 460.10e(3); MSA 22.13(10e)(3).

On June 19, 2000, the Commission commenced this proceeding for the purpose of implementing MCL 460.10e(3); MSA 22.13(10e)(3). In so doing, the Commission assigned to the Commission Staff (Staff) the task of consulting with electric utilities operating in Michigan, owners and operators of merchant plants and proposed merchant plants in Michigan, and other relevant stakeholders to develop recommendations for such standards. The Staff was directed to file an interim status report on the results of its consultations by August 31, 2000 and to submit a final report to the Commission by October 2, 2000.

In its status report, the Staff stated that its had consulted with the Michigan Independent Power Producers Association, the Electric Power Supply Association, Tenaska Incorporated, Unicom Energy, Primary Power Management and Development, Inc., The Detroit Edison Company (Detroit Edison), Consumers Energy Company (Consumers), Cummins & Barnard, Inc., Decker Energy International, Inc. (Decker), PG&E National Energy Group, Southern Energy, Inc., Armstrong Service, Inc., Energy Michigan, American Electric Power Company, Dynegy, Inc., Shell Exploration and Production Company, Wisconsin Electric Power Company, Bay Windpower, the Michigan Electric and Gas Association, and the Midwest Independent Power Suppliers Coordination Group. The Staff summarized the concerns expressed by these stakeholders and indicated that while there did not appear to be a consensus, it was generally recognized that relaying, metering, telemetering, and all such associated equipment would need to be installed as part of any interconnection between a merchant plant and the transmission and distribution facilities of an electric utility. The Staff also stated that the stakeholders generally agreed that the requirements for the interconnection of smaller projects should be different than for larger projects.

Discussion of the Staff's final report

a. Jurisdiction.

In its final report, the Staff first recommended that the Commission address the jurisdictional concerns expressed in the comments by adopting interconnection standards that avoid any conflict with the Federal Energy Regulatory Commission's (FERC) jurisdiction. As noted by the Staff, on several occasions the FERC has held that "interconnection is an element of transmission service and is already required to be provided under [the FERC's] pro forma tariff."¹ According to the Staff, the Commission should follow existing precedent established by its January 14, 1998 orders in Cases Nos. U-11283 and U-11337, which applied a seven factor test outlined by the FERC's Order No. 888² to provide a federal/state jurisdictional delineation between the transmission and local distribution facilities of Consumers and Detroit Edison.

The Commission is well aware that its jurisdiction over merchant plant interconnections is limited by the authority that the FERC exercises over wholesale power transactions. The Legislature was also cognizant of this fact. In Section 10e(4) of Act 141, the Legislature specifically provided that the Commission's authority to establish such standards does not extend to "interconnections or transactions that are subject to the jurisdiction of the federal energy regulatory commission." MCL 460.10e(4); MSA 22.13(10e)(4). With this limitation in mind, the Commis-

¹ See March 15, 2000 order, Docket No. EL00-12-00, 90 FERC 61,238.

² 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, 61 Fed Reg 21,540; FERC Stats & Regs, Regulations Preambles Jan 1991 to June 1996 ¶ 31,036 (1996). Thereafter, the FERC issued Order No. 888-A, which addressed requests for rehearing of Order No. 888 and reaffirmed the FERC's findings regarding the jurisdictional delineation between transmission and local distribution facilities. 62 Fed Reg 12,274; III FERC Stats and Regs ¶ 31,048, at pp. 30,181-82, 30,335-46 (1997).

sion finds that it should adhere to the seven factor test applied in its January 14, 1998 orders in Cases Nos. U-11283 and U-11337 and subsequent orders in establishing merchant plant interconnection standards in accordance with Section 10e(3) of Act 141.

The Commission is aware that application of the seven factor test to individual electric utilities will not necessarily produce the same results because the operating characteristics of the electric utilities in this state are significantly different. For example, for Detroit Edison, adherence to the seven factor test means that the interconnection standards to be established as a result of this proceeding would be applicable to all future interconnections between merchant plants and facilities of Detroit Edison that operate at or below 41.6 kilovolts (kV), except for situations involving radial lines and related facilities that serve end-use customers.³ For Consumers, application of the seven factor test means that the Commission's jurisdiction would extend to all facilities that operate at or below 46 kV and to radial lines and related facilities that serve end-use customers. Although application of the principles followed in Cases Nos. U-11337 and U-11283 for Detroit Edison and Consumers, respectively, will produce different results for other electric utilities, no one has suggested that the Commission should adopt a "one size fits all" approach in implementing MCL 460.10e(3); MSA 22.13(10e)(3).

b. Special treatment of interconnections at higher voltages.

In its final report, the Staff indicated that, while the Commission has authority to establish standards for all interconnections between merchant plants and the local distribution facilities of

³ In Case No. U-11337, Detroit Edison classified its radial lines to end-use customers as well as facilities operating at lower voltages (41.6, 24, 13.2, and 4.8 kV and secondary voltages) as local distribution facilities. The Commission approved this classification. In so doing, the Commission noted that Detroit Edison has several 120 kV radial lines to various end-use customers and at least one 230 kV radial line serving another end-user.

electric utilities subject to its jurisdiction, the Commission should consider deferring application of state-crafted standards for projects that involve unusually high voltages. For example, because Detroit Edison operates 120 kV radial lines to approximately 50 end-use customers, it is possible that a merchant plant could seek to interconnect with Detroit Edison at that voltage. It is the Staff's position that the Commission should not establish interconnection standards that would apply to this class of large projects. Rather, the Staff urged the Commission to focus its attention on interconnections that will occur at voltages that are more normally associated with local distribution facilities. For Detroit Edison, the upper threshold suggested by the Staff would be 41.6 kV. For Consumers, that threshold would be 46 kV. According to the Staff, the Commission should direct utilities that are approached regarding projects involving interconnection at higher voltages to apply interconnection standards for projects having similar characteristics that have been approved by the FERC.

The Commission finds that the Staff's proposal should be adopted. In Section 10e(3), the Legislature directed the Commission to establish interconnection standards that are "consistent with generally accepted industry practices and guidelines" and that "ensure the reliability of electric service and the safety of customers, utility employees, and the general public." The Legislature did not prescribe the form for such standards and did not preclude the Commission from adoption of standards by reference.

The Commission is persuaded that adoption of the Staff's recommendation is consistent with these legislative mandates. It is reasonable to conclude that standards that have been approved by the FERC for similarly-situated projects will be consistent with generally accepted industry practices and guidelines. It is also reasonable to conclude that application of FERC-approved standards will not adversely affect the reliability of electric service or the safety of customers,

utility employees, and the general public in this state. Moreover, considering the purpose underlying passage of Section 10e, adoption of the Staff's recommendation will enhance the Commission's ability to further the goals of the Legislature.

Section 10e was enacted, in part, in response to concern that the interconnection process could be manipulated to impede competitors trying to enter the generation market. The Commission fully endorses the Legislature's policy determination that the interconnection process should not constitute a barrier to market entry. But potential market entry barriers are of much greater concern in situations where the resources of the local utility and the merchant facility are not equal. The Staff's proposal, which affects only the largest of electric utilities and prospective merchant facilities, directs them to resolve the terms of their interconnection agreements in accordance with policies that have already been determined to be reasonable by the FERC for similar situations and allows the Commission and its Staff to concentrate on situations that are more local in nature and that involve struggles between parties of significantly different means. Of course, if experience demonstrates that implementation of the Staff's proposal does not achieve the desired objectives, the Commission has the option, consistent with Section 10e(3) of Act 141, of adopting more definite standards for projects seeking interconnection at higher voltages.

c. Classification of interconnection standards by project size.

Another issue raised by the Staff involves its proposal that the Commission provide for the development of different interconnection standards for projects of different sizes. The Staff report suggested that a number of service quality and safety-related issues, including the prevention of service degradation, the protection of the facilities of the utility and its other customers, and the

possibility of “islanding,”⁴ justify the establishment of interconnection standards that vary in accordance with the complexities presented by projects of different sizes. The Staff also indicated that while some service quality and safety-related devices are common to all interconnection arrangements, experience garnered from interconnections between electric utilities and qualifying facilities pursuant to the Public Utility Regulatory Policies Act of 1978 (PURPA)⁵ demonstrates that a single set of specifications and implementation procedures that may have been appropriate for larger, customized facilities are simply too cumbersome and restrictive for smaller projects.

According to the Staff, both Detroit Edison and Consumers already have interconnection guidelines for independent power producing stations. However, the Staff believes that these current guidelines should be modified to make explicit the differences in technological requirements applicable to different-sized plants.

The Staff explained that a number of utilities in other states have different sets of protective equipment for different levels of generation by merchant plants. As examples, the Staff cited standards adopted by Pacific Gas & Electric Company (six classes), Commonwealth Edison (three classes), the Salt River Project Agricultural Improvement and Power District (four classes), and the State of Texas (four classes). In addition, the Staff stated that the State of New York’s standardized interconnection requirements for facilities of 300 kilovolt-amperes (kVA) or less also recognize that the design of protective equipment depends on a generator’s size, load, and location.

Among the specific suggestions proffered by the Staff are that the size of the proposed merchant plant should control (1) whether a voice circuit is needed, (2) the need for disturbance

⁴ Islanding refers to the continued energization of a portion of a utility’s facilities during an outage situation due to the isolated operation of a merchant plant.

⁵ Pub L 95-617; 92 Stat 3117.

monitoring and telemetering, and (3) the design of main transformer connections, protective relaying requirements, and main disconnect switches.

After studying the approaches followed in other states, the Staff recommended that the Commission recognize that the specific technological requirements applied to achieve the goals of safety, system protection, and preservation of the quality of service should vary depending on the size of the merchant plant seeking interconnection. Further, the Staff suggested that such an approach would provide clearer guidelines to developers of smaller projects while preserving needed protective requirements for projects having a greater potential to affect the operations of the electric utility or its other customers.

Application of the recommendations in the Staff report would result in the designation of five categories of merchant plants in Michigan as follows⁶: (1) under 100 kilowatts (kW),⁷ (2) 100 kW to 499.99 kW, (3) 500 kW to 999.99 kW, (4) 1 Megawatt (MW) to 39.99 MW, and (5) 40 MW or greater.⁸

The Commission finds that the categories of merchant plants proposed by the Staff should be adopted. Authority for the development of different standards by project size is embodied in

⁶ The Commission altered the description of the breakpoints between the classifications proposed by the Staff to avoid overlaps.

⁷ The Commission is currently prohibited by Section 10e(3) of Act 141 from requiring “an electric utility to interconnect with generating facilities with the capacity of less than 100 kilowatts (kw) for parallel operations.” However, this provision does not prevent a utility from voluntarily adopting interconnection standards for merchant plants of less than 100 kW, nor does it relieve a utility from the requirement to adhere to PURPA interconnection standards. The Commission encourages all electric utilities under its jurisdiction to adopt such standards if they are not already in place.

⁸ Because the Commission has opted to require projects seeking interconnection at any voltage over 46 kV to rely upon FERC-approved interconnection standards for similarly-situated merchant plants, it is expected that all interconnections of plants of this size will be accomplished in accordance with FERC-approved interconnection standards.

Section 10e(3) of Act 141 by the requirement that the standards adopted by the Commission “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.” MCL 460.10e(3); MSA 22.13(10e)(3). The Staff report indicates that service quality and safety-related issues justify the establishment of interconnection standards that vary in accordance with the complexities presented by projects of different sizes. Regulations adopted by other states follows the pattern recommended by the Staff. For these reasons, the Commission is persuaded that the interconnection standards adopted pursuant to Section 10e(3) should reflect the categories of merchant plants delineated in this order.

d. Timeliness of review of applications for interconnection.

In its report, the Staff observed that many developers were concerned that the interconnection standards should clearly delineate the time that an electric utility may take to review an interconnection application. According to the Staff, guidelines currently being followed by Detroit Edison and Consumers, which have their origins in the policies established to accommodate PURPA projects, contain few, if any, specific time frames for the completion of utility reviews.

The Staff also reviewed how three states handle applications for interconnections. The Staff discovered that developers in other jurisdictions have far more certainty regarding the time that it will take an electric utility to review an application and complete the interconnection.

In Ohio, interconnections are routinely achieved within four weeks of receipt of a completed application if the interconnection does not require the construction of additional facilities. When facilities must be added, the utility is required to provide the developer with a schedule for completion of the project.

In Texas, interconnection standards applicable to merchant facilities of 10 MW or less provide that interconnections involving “pre-certified” facilities are required to be accomplished within four weeks of the receipt of a completed application. For all other facilities, the interconnection must be completed within six weeks. In the case of facilities that require an upgrade, a cost estimate and time schedule must be provided to the developer and the interconnection must take place within two weeks of the completion of the upgrade.

New York has established a process for the interconnection of small distributed generators that requires the completion of the initial procedural steps in accordance with specific deadlines, but allows some flexibility if site-specific issues arise. Thereafter, the New York rules provide for variances in the construction time for utility system modifications and require the utility and the developer to mutually agree to a schedule for a project’s final testing.

The Commission finds that the concern expressed by developers regarding the existing procedures has merit. Section 10e(1) of Act 141 empowers the Commission to sanction interconnections that are “unduly delayed.” Without more definite standards regarding the time that a utility may take to process an application, project developers will continue to face uncertainties and delays that could frustrate development of a competitive market in this state. Accordingly, the Commission agrees with the Staff that standards should be adopted for the processing of applications that expedite the review process, provide greater certainty to developers, and take into account the varying sizes and complexities of merchant plants. While the Commission intends to allow affected utilities to draft proposed interconnection standards that address these issues, the Commission is persuaded that it should provide some guidance regarding certain specific matters.

The Commission finds that utilities should be required to respond to initial inquiries from developers within 48 to 72 hours. Additionally, a utility should be required to acknowledge receipt

of a completed application within a reasonable time and the acknowledgment should either indicate that the application is acceptable or that the application is deficient and requires the submission of further information. In the event that further information is required, the utility should clearly identify all deficiencies and explain to the developer all steps that must be taken to remedy the deficiencies.

The Commission also endorses the concept that projects involving conventional facilities that do not entail upgrades to a utility's system should be processed and completed expeditiously. If such facilities can be dealt with in a matter of four weeks after submission of a completed application in Ohio and Texas, there is no apparent reason to conclude that Michigan utilities would be incapable of similar performance. Further, when dealing with a larger or unusual facility that may involve an upgrade or other site-specific issues, the Commission is persuaded that the utility should be required to promptly provide the developer with a cost estimate and a reasonably definite progress schedule.

e. Reasonable interconnection study costs.

Another concern expressed to the Staff by certain developers involves the cost of interconnection and systems impact studies, which the Staff asserts could be a detriment to smaller projects. Information garnered by the Staff reveals that other states have grappled with this issue.

In Texas, interconnection standards require that the scope of an interconnection study must be related to the characteristics and location of a proposed project. Additionally, certain "pre-certified" distributed generators in Texas are not subject to a fee for an interconnection study, and if a fee-based interconnection study is required, the utility is required to provide an estimate of the cost of the study to the developer. Furthermore, the Texas rules provide that, if agreed to by the

utility and the developer, a third party may be used to conduct a study.

According to the Staff, a different approach is followed in Ohio. There, utilities are required to have tariff provisions that contain approved standard fee schedules for each type of interconnection service study required.

The Commission's ability to address the issue of interconnection costs is shaped by two provisions of Section 10e. First, in the event that it were to be proven that a utility had imposed excessive costs to prevent or unduly delay the ability of a merchant plant to interconnect with the facilities of the utility, the Commission has authority pursuant to Section 10e(1) to "order remedies designed to make the merchant plant whole" and to impose fines of up to \$50,000 per day on the utility.⁹ Second, Section 10e(3) provides that a merchant plant must pay all of the interconnection costs unless the Commission has otherwise allocated costs and provided for cost recovery.

The message of these two provisions is clear. Under ordinary circumstances, developers should not expect to avoid the payment of reasonable costs for an interconnection study. Further, utilities should be very cautious about inflating the cost of interconnection studies, particularly in view of the substantial penalties for violations of this provision.

Accordingly, the Commission recommends that serious consideration be given to the use of mechanisms designed to keep interconnection study costs in check. For example, utilities could offer to provide developers with an initial feasibility study.¹⁰ Further, for smaller projects, a utility's fees could be incorporated into a rate schedule that would be submitted to the Commission

⁹ The Commission's authority to remedy violations of Section 10e is not limited to the area of interconnection study costs.

¹⁰ This proposal, which was suggested by Decker, appears at page 10 of the Staff's status report.

for approval. In any event, utilities should recognize that the containment of interconnection study costs is an important concern to developers and that the Commission endorses the Staff's suggestion that such costs should accurately reflect the size, type, complexity, and location of a project.

f. Implementation process.

The Staff recommended that the Commission order all electric utilities under its jurisdiction to file proposed interconnection standards that are consistent with this order. The Commission agrees. Attempting to impose a standards on all electric utilities without their input or the comments of other interested persons would be unlikely to produce the type of standards envisioned by the Legislature. Rather, the Commission is persuaded that all affected stakeholders also should be involved in the drafting of the standards.

To that end, the Commission finds that all electric utilities under its jurisdiction should file draft proposed interconnection standards that are consistent with this order and the recommendations contained in the Staff report. Electric utilities shall have 90 days from the date of this order to file their proposals.¹¹ Thereafter, interested persons shall have 30 days to submit comments on the proposals filed by the utilities. Finally, the utilities and other interested persons should feel free to consult with the Staff at any stage of the process.

The Commission has selected this case for participation in its Electronic Filings program. 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)

¹¹ Two or more utilities may fulfill the obligation imposed by this order by cooperating in the preparation of a joint proposal.

should be filed with the Commission. Specifications for filing electronic documents can be found in the Commission's Electronic Filings Users Manual at: <http://ermisbbs.cis.state.mi.us/efile/usersmanual.pdf>. Contact the Commission Staff at 800.292.9555, 517.241.6170, or by E-mail at efile@ermisbbs.cis.state.mi.us prior to filing to obtain access privileges and with any questions.

The Commission FINDS that:

- a. Jurisdiction is pursuant to 1909 PA 106, as amended, MCL 460.551 et seq.; MSA 22.151 et seq.; 1919 PA 419, as amended, MCL 460.51 et seq.; MSA 22.1 et seq.; 1939 PA 3, as amended, MCL 460.1 et seq.; MSA 22.13(1) et seq.; 1969 PA 306, as amended, MCL 24.201 et seq.; MSA 3.560(101) et seq.; and the Commission's Rules of Practice and Procedure, as amended, 1992 AACS, R 460.17101 et seq.
- b. Electric utilities subject to the Commission's jurisdiction should file draft proposed interconnection standards that are consistent with this order. Electric utilities should have 90 days to file their proposals.
- c. Interested persons should have 30 days to submit comments on the proposals filed by the utilities.
- d. The Staff should continue to consult with electric utilities operating in Michigan, owners and operators of merchant plants and proposed merchant plants in Michigan, and other relevant stakeholders to develop standards for the interconnection of merchant plants.

THEREFORE, IT IS ORDERED that:

A. Electric utilities subject to the Commission's jurisdiction shall file, within 90 days, draft proposed interconnection standards that are consistent with this order.

B. Interested persons shall have 30 days to submit comments on the proposals filed by the utilities.

C. The Commission Staff shall continue to consult with electric utilities operating in Michigan, owners and operators of merchant plants and proposed merchant plants in Michigan, and other relevant stakeholders to develop standards for the interconnection of merchant plants.

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

MICHIGAN PUBLIC SERVICE COMMISSION

(S E A L)

/s/ Laura Chappelle
Chairman

By its action of February 5, 2001.

/s/ David A. Svanda
Commissioner

/s/ Dorothy Wideman
Its Executive Secretary

/s/ Robert B. Nelson
Commissioner

THEREFORE, IT IS ORDERED that:

A. Electric utilities subject to the Commission's jurisdiction shall file, within 90 days, draft proposed interconnection standards that are consistent with this order.

B. Interested persons shall have 30 days to submit comments on the proposals filed by the utilities.

C. The Commission Staff shall continue to consult with electric utilities operating in Michigan, owners and operators of merchant plants and proposed merchant plants in Michigan, and other relevant stakeholders to develop standards for the interconnection of merchant plants.

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

MICHIGAN PUBLIC SERVICE COMMISSION

Chairman

By its action of February 5, 2001.

Commissioner

Its Executive Secretary

Commissioner

In the matter, on the Commission's own motion,)
of the interconnection of merchant plants with)
the transmission and distribution systems)
of electric utilities.)
_____)

Case No. U-12485

Suggested Minute:

“Adopt and issue order dated February 5, 2001 directing all electric utilities under the Commission's jurisdiction to file a draft set of standards for the interconnection of merchant plants with their transmission and distribution systems, as set forth in the order.”