

STATE OF NEW YORK DEPARTMENT OF PUBLIC SERVICE

THREE EMPIRE STATE PLAZA, ALBANY, NY 12223-1350

Internet Address: <http://www.dps.state.ny.us>

PUBLIC SERVICE COMMISSION

MAUREEN O. HELMER

Chairman

THOMAS J. DUNLEAVY

JAMES D. BENNETT

LEONARD A. WEISS

NEAL N. GALVIN



LAWRENCE G. MALONE

General Counsel

JANET HAND DEIXLER

Secretary

December 20, 2002

Honorable Magalie R. Salas
Federal Energy Regulatory Commission
888 First Street, N.E.
Room 1-A209
Washington, D.C. 20426

Re: Standardization of Small Generator Interconnection
Agreements and Procedures - RM02-12-000

Dear Secretary Salas:

For filing please find the Comments of the Public Service Commission of New York in the above-entitled proceeding. Should you have any questions, please feel free to contact me at (518) 486-2652.

Very truly yours,

Saul A. Rigberg
Assistant Counsel

Enclosures

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

Standardization of Small Generator) Docket No. RM02-12-000
Interconnection Agreements and Procedures)
)

COMMENTS OF THE PUBLIC SERVICE COMMISSION OF NEW YORK

The New York State Public Service Commission (NYPSC) submits these comments pursuant to Rule 213 of the Commission’s Rules of Practice and Procedure and the “Notice Amending Procedures Described In November 12, 2002 Notice,” dated December 11, 2002.

Copies of all correspondence and pleadings should be addressed to:

Lawrence G. Malone, Esq.
Saul A. Rigberg, Esq.
Public Service Commission
of the State of New York
3 Empire State Plaza
Albany, NY 12223-1350
saul_rigberg@dps.state.ny.us

Ron Liberty
Director Fed. En. Interv.
Public Service Commission
of the State of New York
3 Empire State Plaza
Albany, NY 12223-1350
ronald_liberty@dps.state.ny.us.

The NYPSC agrees with the Advanced Notice of Proposed Rulemaking (ANOPR) that national development of the distributed generation (DG) industry – and consequently, competitive wholesale electric markets – would benefit from elimination of unreasonable barriers to interconnection. In New York, however, the NYPSC already administers an effective interconnection regime that accomplishes the purpose of the ANOPR. We are confident that with the programs and procedures already in place, DG will become an ever more important component of the state’s energy supply portfolio. But we are far less certain that the outcome of this proceeding, unless the Commission rejects many of the working group’s recommendations, would benefit the DG industry or consumers.

The draft Small Generator Interconnection Agreements (SGIAs) and draft Small Generator Interconnection Procedures (SGIPs) developed by the working groups are seriously flawed. Imposition of these documents on the states would impede the progress we have made in New York because, in contrast, our DG interconnection protocols are simpler and work efficiently without compromising health, safety, or system reliability.

Moreover, as we discuss below, the Commission's implicit assertion of jurisdiction over distribution system reliability and health and safety, as well as over cost recovery matters, raises substantial legal and practical issues that the Commission must resolve in any subsequent rulemaking in this docket. To the extent that a DG interconnection is for distribution purposes, the Commission should not assert authority. Further, because the benefits of having the Commission establish national standards are significantly outweighed by the detriments of such an action, it would be better to avoid distracting delays over jurisdictional disputes and focus instead on encouraging programs that work to continue. Accordingly, we recommend that the Commission establish minimum guidelines, rather than prescriptive requirements, for interconnections and defer to the states, which have the field experience and on-site capability, to develop and implement this program. In this way, the Commission would set overall policy but accommodate regional, state, and locational differences by allowing the states to develop, or continue, programs consistent with the policy.

BACKGROUND

New York actively encourages development of DG. Along with demand reduction, DG promotes more competitive electric markets while relaxing pressure to site large baseload generation units and distribution and transmission facilities. Further, it contributes to development of renewable energy resources and could, in certain circumstances, enhance reliability in load pockets. DG also provides customer service options, such as self-generation

(as an alternative to expensive line extensions), backup generation, net metering, interruptibility, third-party sales, and demand response.

In December 1999, the NYPSC adopted Standard Interconnection Requirements (SIR), which apply to generators 300 kVA (kilovoltamp)¹ and smaller.² As of June 2002, 79 generators 300 kVA or less had completed New York's interconnection process. Activity in 2002 has doubled that of preceding years and we expect this trend to continue. In total, 112 applications have been processed to some degree, with the vast majority completed within the time limits (43 to 63 business days) allowed for in the SIR.³

Support by New York for DG has been unwavering. In November 2002, the NYPSC modified the SIR to improve its process, including, most significantly, (1) elimination of study fees for generators 15 kVA or less; (2) streamlining the review process (which must be completed in from 33 to 53 business days); and (3) simplifying the certification process.⁴ The State Legislature recently confirmed its support for DG by amending Public Service Law (PSL) §66-j to require that farm waste systems (400 kW or less) must be allowed to have net metering arrangements with their interconnection providers in the same manner as PV systems (10 kW or less). The new law also limits the amount a developer can be charged for dedicated

¹ A kilovoltamp is 1,000 voltamps. A voltamp is a unit of power measure that reflects both reactive (that is, inductive) and real power (that is, a watt) components. A watt is slightly smaller than a voltamp.

² Case 94-E-0945, Opinion No. 99-13, Opinion and Order Adopting Standard Interconnection Requirements for Distributed Generation Units (issued December 31, 1999, revised November 20, 2002).

³ These figures do not include the experience of Long Island Power Authority (LIPA), which also uses the SIR. LIPA has numerous photovoltaic (PV) sites. Including LIPA sites in the New York statistics would easily double New York's number of DG sites.

⁴ Case 02-E-1282, Order Modifying Standard Interconnection Requirements (issued November 6, 2002).

transformers, where necessary (\$350 for PV, \$3,000 for farm waste), and further limits the amount of system costs that can be charged to the DG developer.

I. IN CONTRAST TO THE NARUC MODEL, THE INITIAL AND CONSENSUS DOCUMENTS SET FORTH A COMPLICATED PROCESS THAT WOULD DELAY DG INTERCONNECTIONS IN NEW YORK.

A. The Proposed Documents Are Seriously Flawed.

The ANOPR presented an interconnection agreement and procedures as a starting point for discussion, but professed to be “open to any proposals that may better meet the goals of this rulemaking.” Para 10. The Commission further invited “efforts to incorporate into our proposed SGIAs [Small Group Interconnection Agreements] and SGIPs [Small Group Interconnection Procedures] the draft distributed generation interconnection procedures and agreement recently released by the NARUC.” Para. 12.

The parties have diligently pursued negotiations over the past three months to further develop the ANOPR’s draft documents and to incorporate portions of the NARUC model. In spite of this concentrated effort, the “consensus” documents submitted in early November, combined with the parties’ explanatory notes filed on December 12, 2002, demonstrate deep philosophical divides among the parties. The result is an extremely convoluted process written in opaque language that could impede the interconnection of truly small DG.

B. The NARUC Model Is Superior.

Over the past several years, New York, Texas, California and Ohio have had in place their own procedures and agreements for the interconnection of generation to the distribution system and have gained valuable experience that should not be discounted. Recognizing that further development of DG would be aided by some commonality of requirements, these states, under the auspices of NARUC and the Department of Energy, melded different processes into a standard “best practices” approach.

Like the New York approach, the NARUC model, which was released in July 2002, presents an easily understood process that is designed to meet the needs of generation interconnecting at the distribution level. The New York and NARUC models provide for a short, clean process and agreement that are written in plain English and will not intimidate or discourage small DG.

For instance, the reliability safeguards common to the participating states include:

- a comprehensive application form that is written in plain English such that the customer or manufacturer can easily supply the interconnecting utility the critical information it requires to develop a utility-grade interconnection that maintains reliability and safety;
- required adherence to the National Electric Code, National Electrical Safety Code and IEEE standards where applicable;
- provision of a study/review process to ensure reliable system operation;
- requirements to follow the applicable manufacturer's recommended maintenance; and
- provision of inspections to ensure that equipment is installed according to design and is maintained at that level.

The process allows for very fast tracking of units that would have a small impact on the surrounding system and requires careful consideration for generation connecting into comparatively constrained areas.⁵ Communication protocols are established from the time of initial contact through the application and study process, the construction and the testing and operations phases. Responsibilities of each party regarding reliable, safe interconnection designs

⁵ There has been discussion regarding whether it is more appropriate to have two procedures, one for generators 0-2 MW and the other for generators 2-20 MW, or whether the two could be combined. Either method could work as long as it is clearly recognized that there are differences between these two size groupings, as provided in the NARUC model. For example, NYPSC would not advocate allowing the super-expedited process for generators larger than 2 MW.

and maintenance are detailed. Liability, Indemnification and Insurance provisions are fully developed. At the same time, flexibility is built into the process to accommodate the myriad of existing distribution system designs and operations. There is also flexibility to allow states that wish to encourage rapid development of DG to incorporate those incentives into the model. Each of these “flexibility” opportunities is represented in the NARUC model by a light bulb.

C. Incorporation Of The NARUC Model Into The ANOPR Process Would Lead To A Seamless Federal/State Interconnection Program.

The ANOPR process has been instrumental in developing more fully the issues related to some of these “light bulbs” – and, in fact, has advanced the discussion to the point where some of the “light bulbs” can be turned off. The NYPSC, however, recommends retention of much of the built in flexibility of the NARUC model because no two distribution systems are designed or operated exactly alike. Geography, economics, and regional preferences have led to the development of systems that best serve local preferences regarding reliability, aesthetic concerns, and environmental protections. As such, overly prescriptive provisions could lead to more problems than are solved. Additionally, while the Commission’s stated goal is to provide a standard interconnection process and agreement for DG that interconnects to transmission or declares the output will be sold at wholesale, there are still many more categories of DG that need to interconnect to the distribution system under state processes. If the Commission were to incorporate the NARUC model into its process, a seamless interconnection program would develop between the federal and state processes.

II. THE COMMISSION'S INVOLVEMENT IN UTILITY DISTRIBUTION SYSTEMS RAISES JURISDICTIONAL, RELIABILITY, HEALTH AND SAFETY, AND COST RECOVERY QUESTIONS.

A. The Commission Does Not Have Jurisdiction Over Reliability, Health And Safety, And Cost Recovery Of Expenses Related To The Distribution System.

The Commission stated in the ANOPR (Para. 5) that under §§ 205 and 206 of the Federal Power Act “it has jurisdiction over generator interconnections when a generator interconnects to a transmission provider’s transmission system or makes wholesale sales in interstate commerce at either the transmission or distribution voltage level.” Recent case law, however, confirms that while the Commission has jurisdiction over wholesale transmission, wholesale commodity, wholesale distribution, and unbundled retail transmission, the states have jurisdiction over retail distribution, retail commodity and bundled retail transmission. New York v. FERC, 122 S. Ct. 1012 (2002); Transmission Access Policy Study Group, et al. v. FERC, F.3d 667 (D.C. Cir. 2000). [“However,” the Supreme Court explained in New York, 122 S. Ct. at 1026, “FERC has not attempted to control local distribution facilities through Order No. 888. To the contrary, FERC has made it clear that it does not have jurisdiction over such facilities, Order No. 888, at 31, 969....”] Significantly, for the issues presented by this docket, the Circuit Court of Appeals for the District of Columbia stated that “the statute [FPA §201] is much less clear about exactly where the lines between those activities are to be drawn.” Transmission Access Policy Study Group, F.3d at 694.

The Commission has stated that there is not always a bright line between federal and state jurisdiction in matters regarding local distribution service. In Order No. 888-B, for instance, the Commission asserted that when a term, condition, or rate is required for local distribution service, the state determination applies, but “where a public utility is delivering unbundled energy from a third-party supplier directly to an end user, the particular facts of the case will

determine which of the facilities are FERC-jurisdictional facilities and which are state-jurisdictional local distribution facilities.”⁶

B. Cooperative Federalism Is A Sounder Approach.

Based on this analysis, the federal/state jurisdiction situation would become extremely complicated by an assertion of Commission jurisdiction over matters that impact the local distribution system. For instance, how could the Commission provide for recovery of costs that result from work related to the distribution system it may order that are incurred by the interconnection provider? Who would handle a dispute regarding whether a particular generator is causing a degradation of distribution reliability? How does one assess jurisdiction in a situation where the generator sells only one percent of its output wholesale through the independent system operator and the balance retail? Ensuring reliability and public and worker health and safety must remain the province of state jurisdiction

III. STATE CERTIFICATION PROCESSES SHOULD CONTINUE UNTIL A NATIONAL STANDARD IS DEVELOPED.

The NYPSC has a certification process in place that requires that generators will be safely disconnected from the utility system in order to ensure that utility lines are properly de-energized to allow utility employees to safely work on them. The certification process is a key foundation for ensuring safe operation and expedites the application process.

The ANOPR relies heavily on Institute of Electrical and Electronic Engineering (IEEE) P1547, the Draft Standard for Interconnecting Distributed Resources with Electric Power Systems, but this is a DRAFT standard that has not been adopted by the IEEE. Also, several of the more important provisions of a national standard, such as testing requirements, are being addressed as sub-components of IEEE P1547, and are incomplete. Because this work is only in

⁶ 81 FERC ¶ 61,248 at 62,098, 62 Fed. Reg. 64, 688 (1997).

its infancy, the Commission should not rely on P1547 until it is more fully adopted with testing protocols in place. Instead, the Commission should allow states with certification processes to continue to use them until the industry adopts a national standard.⁷

IV. SYSTEM PRIORITIES SHOULD REMAIN WITHIN STATE CONTROL.

If the Commission insists on involving itself in local distribution service, it must address whether it intends to become involved in dictating storm restoration priorities and procedures, and if so, the level and scope of authority of field personnel it plans to deploy. In New York, the NYPSC is very active in monitoring and reviewing storm restoration activities on the part of the utilities. All electric utilities are required to file electric storm plans in accordance with PSL §6(20) and explicit rules developed by the NYPSC (16 NYCRR Part 105). These rules require, among other things, the establishment by the utilities of restoration priorities, which often allow interruption of DG when a storm restoration condition is in effect. The priorities are generally governed by: 1) health and safety concerns, and 2) the ability to restore customers as soon as possible. It would be our strong preference that small generators be factored into these priority lists consistent with the same goals (i.e., health and safety first, rapid restoration second).

Similarly, the NYPSC questions the practicality of the Commission second-guessing state decisions. We have found that in severe emergencies it is necessary to move decision-making regarding restoration to the location where the work is being done. The emergency plans developed by electric utilities and approved by the NYPSC, as well as other state and local officials, establish guidelines that become the foundation of decisions that are made in the field. We recommend leaving such decisions on restoration priority to the states in conjunction with utility emergency personnel, which have the field staff necessary to assess the situation on-site.

⁷ The New York regime also contains design requirements for inverters and metering and operating requirements, including voltage and frequency limits.

In the same vein, the Small Generator Coalition (SGC) argues that utilities should evaluate generator interconnection applications on a priority basis over other customer requests. We disagree. Especially for small utilities, the same engineers who are responsible for new customer interconnections, distribution system design, and support emergency restorations also conduct interconnection studies. Giving small generator interconnections a priority over these other activities would require significant additional personnel costs if these other equally important activities were to be maintained. Establishing time frames and milestones for the interconnection process, rather than according to a DG interconnection priority status, would still allow utilities to prioritize work.

V. RELIABILITY/POWER QUALITY OVER THE DISTRIBUTION NETWORK IS A STATE RESPONSIBILITY.

A. Inadequate Criteria Can Degrade Service Quality.

If the Commission were to establish interconnection standards with less rigorous reliability criteria than currently exist in New York, those criteria would degrade the reliability level of the entire distribution system.⁸ Large equipment connected to a distribution system can cause significant power quality problems for retail customers. In fact, in extreme cases, NYSPSC utility tariffs generally allow a utility to disconnect the offending customer to prevent degradation of service.

B. Portions of Distribution Systems Are Not Designed For, Or Capable Of, DG Interconnections.

Generally, interconnection to transmission and primary distribution systems, under New York standards for generators up to 300 kVA in size, do not pose insurmountable problems.

⁸ As described below, maintaining reliable service in New York City presents unique challenges which require the highest safeguards.

However, the characteristics of distribution circuits vary widely; in most cases, a 20 MW generation unit would be larger than the entire load of the circuit under peak load conditions, let alone during off peak times.⁹ Obviously, this would create a system imbalance that would need to be addressed.¹⁰

Interconnection on the secondary distribution system or on the network system should be on an exception basis only, especially with regard to grid network systems. The comments submitted in the consensus documents (at pp. 4-5, 7) regarding spot networks by the Interconnection Providers (IP) and NARUC participants generally state our concerns and we support their adoption. We also support the technical requirements for grid networks that were identified by the IP group. Id. However, the IP comments do not go far enough in describing the underlying reliability requirements for New York City grid networks, which encompass the majority of grid network requirements within the United States.¹¹ The NYPSC urges that distributed generators be allowed to connect to grid networks on an exception basis only until such time as it can be proven that negative system impacts can be controlled.

In addition, the SGC seems to have taken the position at the technical conferences that double contingency network design is not even needed in New York City. The density and needs of New York City have led Con Edison, the local utility, to construct an underground electric delivery system with significant redundancy that provides the highest level of reliability. Con Edison's distribution system is an N-2 system, which means that the system will continue to

⁹ A review of one utility's largest operating region found that of 115 circuits, the peak kVA load ranged from under 1 kVA to 11 kVA. Most circuits fell in the 1.5 kVA to 6.5 kVA range. There were nine circuits -- eight percent -- with a peak load above 7 kVA. Note that the kW ratings of these circuits would be lower than the kVA ratings.

¹⁰ Most, if not all, transmission circuits could accommodate a 20 MW DG unit. That is one of the reasons transmission and distribution should be addressed separately.

¹¹ Con Edison operates 55 distinct distribution grids in New York City.

operate within normal operating levels even after the failure of two of the same kind of system components, e.g., feeders, transformers. Grid network systems, such as those used by Con Edison in its most important load areas, have been designed to serve customers with no momentary interruptions and with a very high degree of service reliability.

September 11th is also a perfect example of how the New York City power system operates with numerous independent grids. Notwithstanding the significant damage experienced by Lower Manhattan's electricity delivery system, continuous electric service was maintained throughout the City other than the small area of Lower Manhattan where the damage occurred. In the days following September 11th, there were no major electric disruptions in any areas of the City outside of Lower Manhattan, nor even minor disruptions that resulted from the attack.

The cost and harm to New York City and its businesses and residents during the few network shutdowns that have occurred have been enormous. Therefore, not only is double contingency criteria a necessity in parts of New York City, but further special precautions are necessary to ensure that New York City network reliability standards are met. Accordingly, the NYPSC advocates taking a safe and slow approach toward opening up New York City grid networks to DG; this critical area should not be a testing ground for whether DG technologies are compatible with utility network systems.¹²

VI. THE COMMISSION CANNOT MANDATE RECOVERY OF COSTS INCURRED ON THE DISTRIBUTION SYSTEM.

A. Study/Analysis Cost Issues Are Multi-faceted.

The area of cost recovery provides another example of why the Commission should establish guidelines, rather than prescriptive standards. No two distribution systems are designed the same. States establish protocols to address a variety of situations that require different

¹² This section of the Comments has been reviewed by New York City's Energy Policy Coordinator and is fully supported by the City of New York.

complexities of analysis, which, in turn, have cost implications. For instance, a concentrated, high load area of the system requires a more complicated analysis than an area with open capacity, and a 10 MW integration study is more costly than a 100 kW integration study. If the Commission's rules are too prescriptive, barriers could be erected for the easy interconnections and the complicated ones might end up having to cut corners; this may have a negative impact on reliability, safety and retail rates.

NYPSC exempts from studies and study costs DG at 15 kVA and below. In our view, the threshold of 15 kVA is a point that demarcates where more serious system studies are needed, because 15 kVA is not much more than the electric demand of a typical house.¹³ We urge the Commission to leave to the states whether and when to subsidize studies by having their cost borne by all retail ratepayers.

B. System Improvement Costs Are Difficult to Determine At The Distribution Level.

While the “but for” cost concept--that the developer is responsible for all upgrades to the distribution system required as a result of its interconnection--seems logical at the transmission level, the actual costs are difficult to determine in practice at the distribution level. The NYPSC is in the first year of a DG pilot program, designed to show areas where DG can help avoid utility upgrades. To date, the program has not shown instances of “but for” costs, mostly because the DGs cannot meet the reliability requirements of the utility system that we require in New York. These requirements are defined in our electric service standards and further supplemented by reliability assurance penalty mechanisms that are contained in utility rate plans. Our DG pilot program will continue for two years, during which time we will continue to

¹³ If a utility system cannot accommodate that level then it has more serious issues with its distribution planning.

explore DG opportunities. The Commission should leave to the states' discretion whether to encourage DG by subsidizing interconnection and systems costs.

CONCLUSION

For the foregoing reasons, the NYPSC respectfully requests that the Commission not impose prescriptive national standards. The Commission should issue guidelines for the states to use as they continue or develop their own DG interconnection programs. Inasmuch as the documents that have so far resulted from the ANOPR proceeding are a step backward, *vis-à-vis* activity in New York, we urge the Commission not to disrupt this robust state program.

Respectfully submitted,

Lawrence G. Malone
General Counsel
By: Saul A. Rigberg
Assistant Counsel
Public Service Commission
of the State of New York
3 Empire State Plaza
Albany, NY 12223-1305
(518) 473-8178

Dated: December 20, 2002
Albany, New York

CERTIFICATE OF SERVICE

I, Jacquelynn R. Nash, do hereby certify that I will serve on December 20, 2002, the foregoing Comments of the Public Service Commission of the State of New York by depositing a copy thereof, first class postage prepaid, in the United States mail, properly addressed to each of the parties of record, indicated on the official service list compiled by the Secretary in this proceeding.

Jacquelynn R. Nash

Date: December 20, 2002
Albany, New York